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3.2.1 Number of papers published per teacher in the Journals notified on UGC website during the last five years (5)

Sr.No.	Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication	ISSN number	Is it listed in UGC Care list/Scopus/Web of Science/other, mention
1	Iot based irrigation system using arduino	Prof.R.K.Solanki	Computer Engineering	International Journal of Computer Engineering and Applications	Jun-20	2321-3469	UGC Reviewed
2	Study of content management system for developing e-commers website	Prof.R.K.Solanki	Computer Engineering	International journal of Research in Bussiness and agriculture technology	Jun-21	e-ISSN 2347 – 517X	Peered Reviewed
3	e-Learning through LMS: New Era of Learning	Prof.A.A.Kolpyakwar	Computer Engineering	International Journal of Computer Engineering and Applications	Jun-20	2321-3469	UGC Reviewed



4	Android based student information system for educational institute	Prof.A.A.Kolpyakwar	Computer Engineering	International Journal of Computer Engineering and Applications	Jun-20	2321-3469	UGC Reviewed
5	Development of architecture in image processing using steganography and cryptography	Prof.A.A.Kolpyakwar	Computer Engineering	International Journal of Computer Engineering and Applications	Jun-20	2321-3469	Peered Reviewed
6	Secure third party auditing of users in cloud computing	Prof.A.A.Kolpyakwar	Computer Engineering	International Journal of Computer Engineering and Applications	Jun-20	2321-3469	UGC Reviewed
7	Secure third party auditing of users in cloud computing	Prof. P.D. Thakare	Computer Engineering	International Journal of Computer Engineering and Applications	Jun-20	2321-3469	UGC Reviewed
8	Secure third party auditing of users in cloud computing	Prof.S.A.Murab	Computer Engineering	International Journal of Computer Engineering and Applications	Jun-20	2321-3469	UGC Reviewed
9	Study of content management system for developing e-commercs website	Prof.S.A.Murab	Computer Engineering	International journal of Research in Bussiness and agriculture technology	Jun-21	e-ISSN 2347 – 517X	Peered Reviewed




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10	Study of content management system for developing e-commers website	Prof.S.A.Murab	Computer Engineering	International journal of Research in Bussiness and agriculture technology	Jun-21	e-ISSN 2347 – 517X	Peered Reviewed
11	Study of content management system for developing e-commers website	Prof.A.A.Kolpyakwar	Computer Engineering	International journal of Research in Bussiness and agriculture technology	Jun-21	e-ISSN 2347 – 517X	Peered Reviewed
12	Inventory Management System	Prof.S.A.Murab	Computer Engineering	International journal of Aquatic Science	2021	2008-8019	Peered Reviewed
13	Inventory Management System	Prof.A.A.Kolpyakwar	Computer Engineering	International journal of Aquatic Science	2021	2008-8019	Peered Reviewed
14	Inventory Management System	Prof.R.S.Sawant	Computer Engineering	International journal of Aquatic Science	2021	2008-8019	Peered Reviewed
15	Inventory Management System	Prof. R.V Deshmukh	Computer Engineering	International journal of Aquatic Science	2021	2008-8019	Peered Reviewed
16	Inventory Management System	Prof.R. M Raut	Computer Engineering	International journal of Aquatic Science	2021	2008-8019	Peered Reviewed
17	Data acquisition and storage system for corporate database using big data	Prof.S.A.Murab	Computer Engineering	International Journal of Computer Engineering and Applications	Jun-20	2321-3469	Peered Reviewed




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18	Data acquisition and storage system for corporate database using big data	Prof. P.D. Thakare	Computer Engineering	International Journal of Computer Engineering and Applications	Jun-20	2321-3469	Peered Reviewed
19	Data acquisition and storage system for corporate database using big data	Prof.S.A.Murab	Computer Engineering	International Journal of Computer Engineering and Applications	Jun-20	2321-3469	Peered Reviewed
20	A Review of Disastrous Condition of Covid-19 & its Vigilance	Dr. V. G. Neve	Electrical Engg	International Journal of Grid and Distributed Computing	Jul-20	2005-4262	Peered Reviewed
21	Intelligence Car Parking System	Dr. V. G. Neve	Electrical Engg	International Journal of Disaster Recovery and Business Continuity	Jul-20	2005-4289	Peered Reviewed
22	Power Quality Issue And Detection Method for Voltage Sag and Swell	Dr. V. G. Neve	Electrical Engg	International Journal of Research in Bioscience, Agriculture and Technology	Jul-20	2347-517X	Peered Reviewed
23	Modelling and simulation of hydro power plant by using MATLAB	Prof. Manjusha D.Hedau	Electrical Engg	International journal of scientific research in engineering and management	Jun-20	2582-3930	Peered Reviewed
24	Comparision of STATCOM and UPQC for Compensation of Voltage Swell in Wind Farm to Weak Grid Connection	Dr. V. G. Neve	Electrical Engg	International Journal of Interdisciplinary Innovative Research and Development	Jan-21	2456-236X	Peered Reviewed



25	Industrial Automation of Cotton Industry by Using Raspberry Pi	Prof. A. A. Zade	Electrical Engg	International Journal of Grid and Distributed Computing	Jul-20	2005-4262	Peered Reviewed
26	Power Quality Issue And Detection Method for Voltage Sag and Swell	Prof. C. H. Kidile	Electrical Engg	International Journal of Research in Bioscience, Agriculture and Technology	Jul-20	2347-517X	Peered Reviewed
27	Substation Monitoring Using Microcontroller and GSM	Prof. C. H. Kidile	Electrical Engg	International Journal of Science Research in Science, Engineering and Technology	Sep-20	2394-4099	Peered Reviewed
28	Smart Flower And Agricultural System	Prof. Ekeshwari A. Rangari	Electrical Engg	International journal of management Technology And Engineering	Jun-20	2249-7455	Peered Reviewed
29	Robotic Devices with Artificial Intelligence	Prof. Ekeshwari A. Rangari	Electrical Engg	International Journal of Grid and Distributed Computing (IJGDC)	Oct-20	2005-4262	Peered Reviewed
30	Synthesis and Charecterization of Polyaniline - Neodymium Composite	Dr.M.B.Wasu	Science and Humanities	Scholars Impact: Inteernational Multidiciplinary Multilingual Peer Reviwed Research Journal	Sep-20	Vol 7, Issue 3, ISSN 2394-7632, EISSN 2394-7640, IMPACT FACTOR 5.98	Peered Reviewed
31	ICT tools : An Effective Way of Teaching	Dr.M.B.Wasu	Science and Humanities	International Journal of Grid and Distributed Computing	Jul-20	ISSN:2005-4262	Peered Reviewed




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32	Poly mtoludine-Cecomposite: Characterization and conductivity study	Dr.M.B.Wasu	Science and Humanities	International Journal of Scientific Research in Engineering and Management	Sptember2020	ISSN: 2582-3930	Peered Reviewed
33	ICT tools : An Effective Way of Teaching	Prof.N.K.Choukade	Science and Humanities	International Journal of Grid and Distributed Computing	Jul-20	ISSN:2005-4262	Peered Reviewed
34	ICT tools : An Effective Way of Teaching	Prof.D.B.Pohare	Electronics & Telecommunica tion Engineering	International Journal of Grid and Distributed Computing	Jul-20	ISSN:2005-4262	Peered Reviewed
35	Low Power with Energy Efficient fixed width Bough Wooly Multiplier	Prof.A.D.Nanure	Electronics & Telecommunica tion Engineering	IJAITE	Volume 3, issue 5, 2021	2455-6491	Peered Reviewed
36	A Review on flow controlled noise through two wheeler silencer by means of CFD tool	Dr. V. L. Bhambere	Mechanical Engg.	IJSRED	Volume 4, Issue 4, 2021	2581-7175	Peered Reviewed
37	Virtual Process used for Design Optimization of a Heavy Duty Leaf Spring and Effect of Vibrations on it by using CAD Tool	Dr. V. L. Bhambere	Mechanical Engg.	IRJET	Volume 8, issue 5, 2021	2395-0056	Peered Reviewed




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38	Optimization and design of steel helical spring by using composite material	Prof. A. M. Shende	Mechanical Engg.	JETIR	Volume 8, Issue 5, Year 2021	2349-5162	Peered Reviewed
39	Design and Analysis of Chassis with Loading Condition and with Weight Optimization Solution	Prof. A. M. Shende	Mechanical Engg.	IJRASET	Volume 9, Issue 5, 2021	2321-9653	Peered Reviewed
40	Virtual Process used for Design Optimization of a Heavy Duty Leaf Spring and Effect of Vibrations on it by using CAD Tool	Prof. A. M. Shende	Mechanical Engg.	IRJET	Volume 8, issue 5, 2021	2395-0056	Peered Reviewed
41	Performance Analysis of Heavy Duty Vehicle King9Pin Using CAD Tool	Prof. A. M. Shende	Mechanical Engg.	IJERS	Volume 9, Issue 5, 2021	2320-9364	Peered Reviewed
42	Optimization and design of steel helical spring by using composite material	Prof. A. M. Shende	Mechanical Engg.	IJSRED	Volume 4 Issue 2, Year 2021	2581-7175	Peered Reviewed




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43	Study On Stress Analysis and Structural Deformation of C-Type Heavy Duty Chassis with Different Materials - A Review	Prof. A. M. Shende	Mechanical Engg.	IJAEM	Volume 3, issue 6 June 2021	2395-5252	Peered Reviewed
44	Study on stress analysis and structural deformation of heavy duty chassis: a review	Prof. A. M. Shende	Mechanical Engg.	IRJMETS	Volume 3, issue 6 June 2021	2582-5208	Peered Reviewed
45	A Review on flow controlled noise through two wheeler silencer by means of CFD tool	Prof. S. S. Bele	Mechanical Engg.	IJSRED	Volume 4, Issue 4, 2021	2581-7175	Peered Reviewed
46	Design and Analysis of Chassis with Loading Condition and with Weight Optimization Solution	Prof. K. N. Kalaspurkar	Mechanical Engg.	IJRASET	Volume 9, Issue 5, 2021	2321-9653	Peered Reviewed




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47	Study On Stress Analysis and Structural Deformation of C-Type Heavy Duty Chassis with Different Materials - A Review	Prof. K. N. Kalaspurkar	Mechanical Engg.	IJAEM	Volume 3, issue 6 June 2021	2395-5252	Peered Reviewed
48	Study on stress analysis and structural deformation of heavy duty chassis: a review	Prof. K. N. Kalaspurkar	Mechanical Engg.	IRJMETS	Volume 3, issue 6 June 2021	2582-5208	Peered Reviewed
49	A Review on Rotavator Blade Study and its Life Improvement by Means of FEA Analysis	Prof. Mohiuddin Anees Ahmad Khan	Mechanical Engg.	IJSRED	Volume 4, Issue 4, 2021	2581-7175	Peered Reviewed
50	Low Power with Energy Efficient fixed width Bough Wooly Multiplier	Prof. Mohiuddin Anees Ahmad Khan	Mechanical Engg.	IJAITE	Volume 3, issue 5, 2021	2455-6491	Peered Reviewed
51	Endurance Testing of Tractor Trolley Axle by Using Finite Element Analysis	Prof. B. K. Chavhan	Mechanical Engg.	IJRDT	Volume-16, Issue-2, (Month-2021)	2349-3585	Peered Reviewed
52	Efficient Kinetic Energy Recovery System for Vehicle	Prof. P. H. Rathod	Mechanical Engg.	IJSRD	Volume 8, Issue 5, Aug-2020	2321-0613	Peered Reviewed




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53	Air Flow Analysis of Solar Air Heater Using CFD Tool	Prof. A. B. Dhumne	Mechanical Engg.	IJRDT	Volume-15, Issue-5, May-2021	2349-3585	Peered Reviewed
54	Soil Stabilization by using Waste Material - Brick Dust	Prof. P. K. Pardakhe	Civil Engineering	International Research Journal of Engineering and Technology (IRJET), e-ISSN: 2395-0056 p-ISSN:2395-0072, Vol.06, Issue 9 Sept 2019	Sep-01	ISSN:2395-0072, Vol.06, Issue 9	Peered Reviewed
55	A review article on study analysis of T-Beam Bridge by Finite Element Method and Courbon's Method	Prof. P. K. Pardakhe	Civil Engineering	International Research Journal of Engineering and Technology (IRJET), e-ISSN: 2395-0056 p-ISSN:2395-0072, Vol.06, Issue 9 Sept 2019	Sep-01	ISSN:2395-0072, Vol.06, Issue 9	Peered Reviewed
56	Soil Stabilization by using Waste Material - Brick Dust	Prof. P. V. Ban	Civil Engineering	International Research Journal of Engineering and Technology (IRJET), e-ISSN: 2395-0056 p-ISSN:2395-0072, Vol.06, Issue 9 Sept 2019	Sep-01	International Research Journal of Engineering and Technology (IRJET), e-ISSN: 2395-0056 p-ISSN:2395-0072, Vol.06, Issue 9	Peered Reviewed




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57	A review article on study analysis of T-Beam Bridge by Finite Element Method and Courbon's Method	Prof. P. V. Ban	Civil Engineering	International Research Journal of Engineering and Technology (IRJET), e-ISSN: 2395-0056 p-ISSN:2395-0072, Vol.06, Issue 9 Sept 2019	Sep-01	e-ISSN: 2395-0056 p-ISSN:2395-0072, Vol.06, Issue 9	Peered Reviewed
58	A review study on analysis of venturimeter using computational fluid dynamic (CFD) for performance improvement	Prof. P. V. Ban	Civil Engineering	International Research Journal of Engineering and Technology (IRJET), e-ISSN: 2395-0056 p-ISSN:2395-0072, Vol.06, Issue 10 Oct 2019	Oct-01	e-ISSN: 2395-0056 p-ISSN:2395-0072, Vol.06, Issue 10 Oct 2019	Peered Reviewed
59	A review paper on improving durability of self healing concrete	Prof. M. R. Bhatkar	Civil Engineering	International Research Journal of Engineering and Technology (IRJET), e-ISSN: 2395-0056 p-ISSN:2395-0072, Vol.06, Issue 9 Sept 2019	Sep-01	e-ISSN: 2395-0056 p-ISSN:2395-0072, Vol.06, Issue 9	Peered Reviewed




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60	A review paper on application of Bacillus Subtilis Bacteria for improving properties and healing of cracks in concrete	Prof. M. R. Bhatkar	Civil Engineering	International Research Journal of Engineering and Technology (IRJET), e-ISSN: 2395-0056 p-ISSN:2395-0072, Vol.06, Issue 9 Sept 2019	Sep-01	e-ISSN: 2395-0056 p-ISSN:2395-0072, Vol.06, Issue 9	Peered Reviewed
61	A review study on analysis of venturimeter using computational fluid dynamic (CFD) for performance improvement	Prof. M. R. Bhatkar	Civil Engineering	International Research Journal of Engineering and Technology (IRJET), e-ISSN: 2395-0056 p-ISSN:2395-0072, Vol.06, Issue 10 Oct 2019	Oct-01	e-ISSN: 2395-0056 p-ISSN:2395-0072, Vol.06, Issue 10	Peered Reviewed
62	Comparative Seismic Response of RCC and Steel Frame by Pushover Analysis	Prof. R. J. Raut	Civil Engineering	International Journal of Research in Engineering, Science and Management (IJRESM), ISSN(Online): 2581-5792, Vol.-2, Issue-6, June 2019	Jun-01	ISSN(Online): 2581-5792, Vol.-2, Issue-6,	Peered Reviewed




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63	Comparative Seismic Response of RCC and Steel Frame by Pushover Analysis	Prof. S. R. Raut	Civil Engineering	International Journal of Research in Engineering, Science and Management (IJRESM), ISSN(Online): 2581-5792, Vol.-2, Issue-6, June 2019	Jun-01	ISSN(Online): 2581-5792, Vol.-2, Issue-6,	Peered Reviewed
64	Waste minimization for highway construction	Prof. A. K. Gahalod	Civil Engineering	International Research Journal of Engineering and Technology (IRJET), e-ISSN: 2395-0056 p-ISSN:2395-0072, Vol.06, Issue 10 Oct 2019	Oct-01	e-ISSN: 2395-0056 p-ISSN:2395-0072, Vol.06, Issue 10	Peered Reviewed
65	Waste minimization for highway construction	Prof. V. R. Bankar	Civil Engineering	International Research Journal of Engineering and Technology (IRJET), e-ISSN: 2395-0056 p-ISSN:2395-0072, Vol.06, Issue 10 Oct 2019	Oct-01	e-ISSN: 2395-0056 p-ISSN:2395-0072, Vol.06, Issue 10	Peered Reviewed




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66	Experimental study of floating column for Seismic Analysis of Multi-storey Building	Prof. T. N. Kothari	Civil Engineering	International Research Journal of Engineering and Technology (IRJET), e-ISSN: 2395-0056 p-ISSN:2395-0072, Vol.06, Issue 10 Oct 2019	Oct-01	e-ISSN: 2395-0056 p-ISSN:2395-0072, Vol.06, Issue 10	Peered Reviewed
67	Experimental study of floating column for Seismic Analysis of Multi-storey Building	Prof. P. P. Deogade	Civil Engineering	International Research Journal of Engineering and Technology (IRJET), e-ISSN: 2395-0056 p-ISSN:2395-0072, Vol.06, Issue 10 Oct 2019	Oct-01	e-ISSN: 2395-0056 p-ISSN:2395-0072, Vol.06, Issue 10	Peered Reviewed
68	Experimental study of floating column for Seismic Analysis of Multi-storey Building	Prof. V. R. Jaiswal	Civil Engineering	International Research Journal of Engineering and Technology (IRJET), e-ISSN: 2395-0056 p-ISSN:2395-0072, Vol.06, Issue 10 Oct 2019	Oct-01	e-ISSN: 2395-0056 p-ISSN:2395-0072, Vol.06, Issue 10	Peered Reviewed
69	A review on Basics of Heat Exchanger	Dr. V. L. Bhambere	Mechanical Engg.	International Research Journal of Engineering & Technology (IRJET)	Vol. 6 Issue 10, Oct-2019	2395-0056	Peered Reviewed




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70	Review on Design Optimization and Vibration Analysis of Heavy Duty Leaf Spring By using CAD Tool	Dr. V. L. Bhambere	Mechanical Engg.	International Research Journal of Engineering & Technology (IRJET)	Vol. 7 Issue 4, Apr-2019	2395-0056	Peered Reviewed
71	Efficient Kinetic Energy recovery System For Vehicle	Prof. P. H. Rathod	Mechanical Engg.	International for Scientific Research & Development	Vol. 8 Issue 5, Jul-2020	2321-0613	Peered Reviewed
72	Floating Solar Power Plants: A Review	Prof. P. H. Rathod	Mechanical Engg.	International Research Journal of Engineering & Technology	Vol. 07 Issue 01	2395-0056	Peered Reviewed
73	Floating Solar Power Plants: A Review	Prof. Ashish Bandewar	Mechanical Engg.	International Research Journal of Engineering & Technology	Vol. 07 Issue 01	2395-0056	Peered Reviewed
74	A review on Basics of Heat Exchanger	Prof. P. H. Rathod	Mechanical Engg.	International Research Journal of Engineering & Technology (IRJET)	Vol. 6 Issue 10, Oct-2019	2395-0056	Peered Reviewed
75	A review on Basics of Heat Exchanger	Prof. A. B. Samarth	Mechanical Engg.	International Research Journal of Engineering & Technology (IRJET)	Vol. 6 Issue 10, Oct-2019	2395-0056	Peered Reviewed
76	AGRICULTURE PRODUCT SELLING SYSTEM FOR FARMERS	PROF. A. M. DHORE	Comp. Engineering	International Journal of Advanced Innovative Technology in Engineering	Mar-20	2321-3469	Peered Reviewed




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77	A Survey on Line Follower Using Raspberry Pi	A. A. Kolpyakwar	Comp. Engineering	International Journal of Computer Science and Information Technology Research	Mar-20	2348-1196	Peered Reviewed
78	ANDROID BASED STUDENT INFORMATION SYSTEM FOR EDUCATIONAL INSTITUTE	A. A. Kolpyakwar	Comp. Engineering	International Journal of Computer Engineering and Applications	Jun-20	2321-3469	UGC Reviewed
79	ANDROID BASED STUDENT INFORMATION SYSTEM FOR EDUCATIONAL INSTITUTE	Prof. S.A. Murab	Comp. Engineering	International Journal of Computer Engineering and Applications	Jun-20	2321-3469	UGC Reviewed
80	A Survey on Line Follower Using Raspberry Pi	Ram Kumar Solanki	Comp. Engineering	International Journal of Scientific and engineering research	Sep-19	ISSN 2348-1196	Peered Reviewed
81	IOT BASED IRRIGATION SYSTEM USING ARDUINO	Ram Kumar Solanki	Comp. Engineering	International Journal of Computer Engineering and Applications	Jun-20	2321-3469	UGC Reviewed
82	LINE FOLLOWER USING RASPBERRY PI	A. A. Kolpyakwar	Comp. Engineering	International Journal of Computer Engineering and Applications	Jun-20	ISSN 2321-3469	Peered Reviewed




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83	MINIMIZING INFORMATION LEAKAGE IN MULTICLOUD STORAGE SERVICE	Prof. S.A. Murab	Comp. Engineering	International Journal of Computer Engineering and Applications	Jun-20	2321-3469	UGC Reviewed
84	MINIMIZING INFORMATION LEAKAGE IN MULTICLOUD STORAGE SERVICE	Prof. P. D. Thakare	Comp. Engineering	International Journal of Computer Engineering and Applications	Jun-20	2321-3469	UGC Reviewed
85	DATA ACQUISITION AND STORAGE SYSTEM FOR CORPORATE DATABASE USING BIG DATA	Prof.P.D.Thakare	Comp. Engineering	International Journal of Computer Engineering and Applications	Jun-20	2321-3469	UGC Reviewed
86	ARTIFICIAL INTELLIGENCE BASED EDGE COMPUTING PLATFORM FOR INDUSTRIAL APPLICATIONS	Prof.S.A. Murab	Comp. Engineering	International Journal of Computer Engineering and Applications	Jun-20	ISSN 2321-3469	UGC Reviewed
87	USED BOOK PLATFORM	Prof.S.A. Murab	Comp. Engineering	International Journal of Computer Engineering and Applications	Jun-20	ISSN 2321-3469	UGC Reviewed




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88	DEVELOPMENT OF ARCHITECTURE IN IMAGE PROCESSING USING STEGANOGRAPHY AND CRYPTOGRAPHY	A. A. Kolpyakwar	Comp. Engineering	International Journal of Computer Engineering and Applications	Jun-20	2321-3469	UGC Reviewed
89	SECURE THIRD PARTY AUDITING OF USERS IN CLOUD COMPUTING	Prof.S.A. Murab	Comp. Engineering	International Journal of Computer Engineering and Applications	Jun-20	ISSN 2321-3469	Peered Reviewed
90	e-Learning through LMS: New Era of Learning	A. A. Kolpyakwar	Comp. Engineering	International Journal of Computer Engineering and Applications	Jun-20	2321-3469	UGC Reviewed
91	A SURVEY ON E-FARMING	Prof.P.D.Thakare	Comp. Engineering	International Journal of Computer Engineering and Applications	Jun-20	2321-3469	Peered Reviewed
92	Real Time Vehicle Number Plate Recognition by using Raspberry Pi3	Prof.R.S.Sawant	Comp. Engineering	International Journal of Research in Engineering, Science and Management	Mar-20	2321-3469	Peered Reviewed




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93	A Review on Image, Video Frames, Text Detection and Character Recognition in Scene	Prof.R.V.Deshmukh	Comp. Engineering	International Journal of Science, Engineering and Management (IJSEM)	Jul-05	ISSN (Online) 2456 - 1304	Peered Reviewed
94	A Review on Image, Video Frames, Text Detection and Character Recognition in Scene	Prof.Rahul Raut	Comp. Engineering	International Journal of Science, Engineering and Management (IJSEM)	Jul-05	ISSN (Online) 2456 - 1304	Peered Reviewed
95	A Review on Image, Video Frames, Text Detection and Character Recognition in Scene	A. A. Kolpyakwar	Comp. Engineering	International Journal of Science, Engineering and Management (IJSEM)	Jul-05	ISSN (Online) 2456 - 1304	Peered Reviewed
96	A Review on Image, Video Frames, Text Detection and Character Recognition in Scene	Kiran L. Chavhan	Comp. Engineering	International Journal of Science, Engineering and Management (IJSEM)	Jul-05	ISSN (Online) 2456 - 1304	Peered Reviewed
97	SURVEILLANCE USING FACIAL RECOGNITION	Kiran L. Chavhan	Comp. Engineering	International Journal of Computer Engineering and Applications	Jun-20	ISSN 2321-3469	UGC Reviewed
98	A Survey on Surveillance using Facial Recognition	Kiran L. Chavhan	Comp. Engineering	International Journal of Engineering Research & Technology (IJERT)	Oct-22	ISSN: 2278-0181	UGC Reviewed




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99	ICT Tools: An Effective Way of Teaching	Prof. D. B. Pohare	Extc Engineering	International Journal of Grid and Distributed Computing Vol. 13 No. 1s	2020	2005-4262	Peered Reviewed
100	Review of quality problem improvement by integration of solar PV panel and DFIG wind system with UPQC	Prof. Priyanka H.Kadam	Elect Engineering	International research journal of engg and techhnology	Sep-22	2395-0056	Peered Reviewed
101	Modelling and simulation of hydro power plant by using MATLAB	Prof. Manjusha D. Hedau	Elect Engineering	International journal of scientific research in engineering and management	Jun-20	2394-3084	Peered Reviewed
102	Design and analysis of synchronous reference frame based shunt active power fiter using MATLAB simulink	Prof. Chetan H. Kidile	Elect Engineering	International journal of innovation in engg and science(IJIES)	May-20	2456-3463	Peered Reviewed
103	Camparative study of time domain based control technique for shunt active power filter MATLAB/ simulink	Prof. Chetan H. Kidile	Elect Engineering	International journal of innovation in engg and science(IJIES)	Aug-01	2456-3463	Peered Reviewed




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104	A Review of Disastrous Condition of COVID -19 & its Vigilance	Dr. V. G. Neve	Elect Engineering	International Journal of Grid and Distributed Computing Vol. 13 No. 1s	2020	2005-4262	Peered Reviewed
105	Intelligent Car Parking System	Dr. V. G. Neve	Elect Engineering	International Journal of Diaster Recovery and Bussiness Continuity Vol. 11 No. 1	2020	2005-4289	Peered Reviewed
106	Three Phase Line Fault Detection Using Artificial Neural Network	Dr. Vijay. G. Neve	Elect Engineering	International Research Journal of Engineering and Techhnology	Sep-19	2395-0056	Peered Reviewed
107	Power Harvesting from Mechanical Vibrations in Footwear Shoes	Dr. Vijay. G. Neve	Elect Engineering	Global Journal of Engineering, Science & Social Science Studies (GJESSSS)	Jun-19	2394-3084	Peered Reviewed
108	Voltage Sag Metigation By using Integrated Nine Switch Power Conditioners	Prof. Pravin S. Wankhade	Elect Engineering	International Journal of Electronics, Communication & Soft Computing Science and Engineering	2019	2394-3084	Peered Reviewed
109	Three Phase Line Fault Detection Using Artificial Neural Network	Prof. Pallavi. V. Pullawar	Elect Engineering	International Research Journal of Engineering and Techhnology	Sep-19	2395-0056	Peered Reviewed




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110	Power Harvesting from Mechanical Vibrations in Footwear Shoes	Prof. Manjusha D.Hedau	Elect Engineering	Global Journal of Engineering, Science & Social Science Studies (GJESSSS)	Jun-19	2394-3084	Peered Reviewed
111	Power Harvesting from Mechanical Vibrations in Footwear Shoes	Prof. Ekeshwari A. Rangari	Elect Engineering	Global Journal of Engineering, Science & Social Science Studies (GJESSSS)	Jun-19	2394-3084	Peered Reviewed
112	Literature Review on Smart Flower And Agriculatur System	Prof. Ekeshwari A. Rangari	Elect Engineering	International Research Journal of Engineering and Techhnology	Sep-22	2395-0072	Peered Reviewed
113	Power Harvesting from Mechanical Vibrations in Footwear Shoes	Prof. Shubham A. Shriwas	Elect Engineering	Global Journal of Engineering, Science & Social Science Studies (GJESSSS)	Jun-22	2394-3084	Peered Reviewed
114	Power Harvesting from Mechanical Vibrations in Footwear Shoes	Prof. Avantika B. Tayade	Elect Engineering	Global Journal of Engineering, Science & Social Science Studies (GJESSSS)	Jun-22	2394-3084	Peered Reviewed
115	RC Drone Quadcopter As Spy Cam	Prof. A. A. Chincholkar	Electronics & Telecommunica tion Engineering	International Journal of Advanced Innovative Technology in Engineering (IJAITE) Vol. 4 Issue 2	Mar-19	e-ISSN: 2455-6491	Peered Reviewed




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116	A Review on RC Drone Quadcopter As Spy Cam	Prof. A. A. Chincholkar	Electronics & Telecommunication Engineering	International Journal of Advanced Innovative Technology in Engineering (IJAITE) Vol. 4 Issue 2	Mar-19	e-ISSN: 2455-6492	Peered Reviewed
117	Identification of Diabetes Using Artificial Intelligence Technique	Prof. S. D. Kale	Electronics & Telecommunication Engineering	International Journal of Advanced Innovative Technology in Engineering (IJAITE) Vol. 4 Issue 2	Mar-19	e-ISSN: 2455-6493	Peered Reviewed
118	A Review on Identification of Diabetes Using Artificial Intelligence Technique	Prof. S. D. Kale	Electronics & Telecommunication Engineering	International Journal of Advanced Innovative Technology in Engineering (IJAITE) Vol. 4 Issue 2	Mar-19	e-ISSN: 2455-6494	Peered Reviewed
119	Animal Detection System in Farm Areas	Prof. S. D. Kale	Electronics & Telecommunication Engineering	International Journal of Advanced Innovative Technology in Engineering (IJAITE) Vol. 4 Issue 2	Mar-19	e-ISSN: 2455-6495	Peered Reviewed




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120	Digital Switching Panel Using Aurdino-Mega 2560 and TFT Display	Prof. R. M. Shah	Electronics & Telecommunication Engineering	International Journal of Research in Computer & Information Technology (IJRCIT) Vol. 4 Issue 2	Mar-19	ISSN: 2455-6491	Peered Reviewed
121	Digital Switching Panel Using Aurdino-Mega 2560 and TFT Display	Prof. R. M. Shah	Electronics & Telecommunication Engineering	International Journal of Advanced Innovative Technology in Engineering (IJAITE) Vol. 4 Issue 2	Mar-19	e-ISSN: 2455-6497	Peered Reviewed
122	Review on Facial Recognition Door Access and Security System Using Raspberry	Prof. A. R. Dudhe	Electronics & Telecommunication Engineering	International Journal of Advanced Innovative Technology in Engineering (IJAITE) Vol. 4 Issue 2	Mar-19	e-ISSN: 2455-6498	Peered Reviewed
123	Facial Recognition Door Access and Security System Using Raspberry	Prof. A. R. Dudhe	Electronics & Telecommunication Engineering	International Journal of Advanced Innovative Technology in Engineering (IJAITE) Vol. 4 Issue 2	Mar-19	e-ISSN: 2455-6499	Peered Reviewed




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124	Agriculture Monitoring and Soil Moisture Detection Using Arduino	Prof. K. L. Thakare	Electronics & Telecommunication Engineering	International Journal of Advanced Innovative Technology in Engineering (IJAITE) Vol. 4 Issue 2	Mar-19	e-ISSN: 2455-6500	UGC Reviewed
125	Agriculture Monitoring and Soil Moisture Detection Using Arduino	Prof. K. L. Thakare	Electronics & Telecommunication Engineering	International Journal of Research in Computer & Information Technology (IJRCIT) Vol. 4 Issue 2	Mar-19	ISSN: 2455-6491	UGC Reviewed
126	GSM Based Scrolling Notice Board	Prof. V. K. Barbudhe	Electronics & Telecommunication Engineering	International Journal of Advanced Innovative Technology in Engineering (IJAITE) Vol. 4 Issue 2	Mar-19	e-ISSN: 2455-6500	Peered Reviewed
127	Review on GSM Based Scrolling Notice Board	Prof. V. K. Barbudhe	Electronics & Telecommunication Engineering	International Journal of Research in Computer & Information Technology (IJRCIT) Vol. 4 Issue 2	Mar-19	ISSN: 2455-6491	Peered Reviewed




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128	Review on Flower Dropping Using RC Drone Quadcopter	Dr. A. D. Shelotkar	Electronics & Telecommunication Engineering	International Journal of Advanced Innovative Technology in Engineering (IJAITE) Vol. 4 Issue 2	Mar-19	e-ISSN: 2455-6500	Peered Reviewed
129	Flower Dropping Using RC Drone Quadcopter	Dr. A. D. Shelotkar	Electronics & Telecommunication Engineering	International Journal of Research in Computer & Information Technology (IJRCIT) Vol. 4 Issue 2	Mar-19	ISSN: 2455-6491	Peered Reviewed
130	Bus Safety System For School Children By Using RFID and GSM Modem	Prof. P. R. Patil	Electronics & Telecommunication Engineering	International Journal of Advanced Innovative Technology in Engineering (IJAITE) Vol. 4 Issue 2	Mar-19	e-ISSN: 2455-6500	Peered Reviewed
131	Womens Security System Using Raspberry PI	Prof. R. S. Shriwas	Electronics & Telecommunication Engineering	International Journal of Advanced Innovative Technology in Engineering (IJAITE) Vol. 4 Issue 2	Mar-19	e-ISSN: 2455-6501	Peered Reviewed




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132	Footstep Power Generation Using Piezoelectric Transducer	Prof. V. R. Thakare	Electronics & Telecommunication Engineering	International Journal of Advanced Innovative Technology in Engineering (IJAITE) Vol. 4 Issue 2	Mar-19	e-ISSN: 2455-6502	Peered Reviewed
133	Detecting Brain Tumor Using K-mean Clustering and Morphological Operations	Prof. D. B. Pohare	Electronics & Telecommunication Engineering	International Research Journal of Engineering & Technology (IRJET) Vol. 6 Issue 1	Jan-19	e-ISSN: 2395-0056	Peered Reviewed
134	Neural Networks For Video Error Concealment	Dr. A. D. Shelotkar	Electronics & Telecommunication Engineering	Global Journal of Engineering, Science & Social Science Studies, Volume 05, Issue 06	Jun-19	ISSN:0975-9646	Peered Reviewed
135	Neural Networks For Video Error Concealment	Dr. H. M. Baradkar	Electronics & Telecommunication Engineering	Global Journal of Engineering, Science & Social Science Studies, Volume 05, Issue 06	Jun-19	ISSN:0975-9646	Peered Reviewed
136	Development of Fuzzy Controller For Spectrum Mobility In Cognitive Radio	Prof. P. R. Patil	Electronics & Telecommunication Engineering	Global Journal of Engineering, Science & Social Science Studies, Volume 05, Issue 06	Jun-19	ISSN:0975-9646	Peered Reviewed




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137	Development of Fuzzy Controller For Spectrum Mobility In Cognitive Radio	Dr. H. M. Baradkar	Electronics & Telecommunication Engineering	Global Journal of Engineering, Science & Social Science Studies, Volume 05, Issue 06	Jun-19	ISSN:0975-9646	Peered Reviewed
138	Synthesis and Characterization of Poly m-toludine–Ce metal composite	Prof. D. B. Pohare	Electronics & Telecommunication Engineering	Global Journal of Engineering, Science & Social Science Studies, Volume 05, Issue 06	Jun-19	ISSN:0975-9646	Peered Reviewed
139	Comparative Study of Earth Pressure Theories On Retaining Wall Considering Earthquake Forces	Prof. N. V. Bandwal	Civil Engineering	International Journal For Research In Applied Science & Engineering Technology (IJRASET), Vol 7 Issue IV	Apr-19	2321-9653	Peered Reviewed
140	Analysis And Design of Media Filter For Waste Water Treatment	Prof. H. D. Mishra	Civil Engineering	International Journal of Innovations In Engineering And Science (IJIES), Vol. 4 Issue 4	Jul-19	2278-0181	Peered Reviewed
141	Transparent Concrete: An Evolution Towards Better India	Prof. H. D. Mishra	Civil Engineering	International Journal of Innovations In Engineering And Science (IJIES), Vol. 4 Issue 4	Jul-19	2456-3463	Peered Reviewed




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142	A Study On Partial Replacement of Cement By Waste Paper Pulp In Concrete	Prof. T. M. Khandale	Civil Engineering	International Journal of Innovations In Engineering And Science (IJIES), Vol. 4 Issue 4	Jul-19	2456-3463	Peered Reviewed
143	A Comparative Study On Nominal Mix With Partially Replaced Cement By Paper Pulp Mix (Trial Mix)	Prof. T. M. Khandale	Civil Engineering	International Journal of Innovations In Engineering And Science (IJIES), Vol. 4 Issue 4	Jul-19	2456-3463	Peered Reviewed
144	Partial Replacement of Cement In Concrete With Sugarcane Bagasse Ash	Prof. P. S. Kumbhare	Civil Engineering	International Journal of Innovations In Engineering And Science (IJIES), Vol. 4 Issue 4	Jul-19	2456-3463	Peered Reviewed
145	Transparent Concrete: An Evolution Towards Better India	Prof. S. R. Raut	Civil Engineering	International Journal of Innovations In Engineering And Science (IJIES), Vol. 4 Issue 4	Jul-19	2456-3463	Peered Reviewed
146	Stabilisation of Black Cotton Soil By Using Envirobase And Sodium Silicate With Lime	Prof. S. R. Raut	Civil Engineering	International Journal of Research In Advent Technology (IJRAT), Vol. 7, Issue 4S	Apr-19	2456-3463	Peered Reviewed




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147	Comparative Study of Seismic Analysis of Building with Light weight and Conventional Material	Prof. S. R. Raut	Civil Engineering	International journal for Research in applied science& engineering Technology, Vol.- 7, Issue 5	May-19	2321-9653	Peered Reviewed
148	Application of Industrial Waste In The Manufacturing of Self Compacting Concrete	Prof. P. P. Deogade	Civil Engineering	International Journal For Research In Applied Science & Engineering Technology (IJRASET), Vol 7 Issue III	Mar-19	2321-9653	Peered Reviewed
149	Response Spectrum Analysis of Soft Storey In Building	Prof. M. M. Inamdar	Civil Engineering	Journal of Emerging Technologies And Innovative Research (JETIR), Vol 4 Issue 6	Jul-19	2349-5162	Peered Reviewed
150	Influence of Glass Powder In PPC	Prof. A. H. Meshram	Civil Engineering	International Journal For Scientific Research & Development (IJSRD), Vol 7, Issue 1	Mar-19	2250-3021	Peered Reviewed
151	Using Various Materials As A Partial Replacement of Cement	Prof. A. H. Meshram	Civil Engineering	International Journal of Advance Research, Idea And Innovations In Technology (IJARIIT), Vol 5, Issue 2	Apr-19	ISSN:2229-5518	Peered Reviewed




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152	Partial Replacement of PPC With Glass Power	Prof. A. H. Meshram	Civil Engineering	International Journal of Advance Research, Idea And Innovations In Technology (IJARIIT), Vol 5, Issue 2	Apr-19	2250-3021	Peered Reviewed
153	Partial Replacement of PPC With Glass Power	Prof. A. H. Meshram	Civil Engineering	International Journal For Engineering Applications And Technology, Vol 1 Issue 4	Mar-19	2250-3021	Peered Reviewed
154	Experimental Study On Engineered Cementitious Composite	Prof. M. R. Bhatkar	Civil Engineering	International Research Journal of Engineering And Technology (IRJET), Volume: 06 Issue: 04	Apr-19	2395-0072	Peered Reviewed
155	A Review On Engineered Cementitious Composite (ECC)	Prof. M. R. Bhatkar	Civil Engineering	International Research Journal of Engineering And Technology (IRJET), Volume: 06 Issue: 04	Apr-19	2395-0072	Peered Reviewed




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156	Comparative Study of Seismic Analysis of Building with Light weight and Conventional Material	Prof. R. J. Raut	Civil Engineering	International journal for Research in applied science & engineering Technology, Vol.- 7, Issue 5	May-19	2321-9653	Peered Reviewed
157	Comparative Seismic Response of RCC and Steel Frame by Pushover Analysis	Prof. R. J. Raut	Civil Engineering	International journal of research in Engineering, Science and Management, Vol.-2, Issue-6	Jun-19	2581-5792	Peered Reviewed
158	Analysis, Design & Development of U-shaped precast panel for serviceability improvement of Flexible pavements	Prof. K. D. Dagwal	Civil Engineering	International journal for Research in applied science & engineering Technology, Vol-7, Issue 5	May-19	2321-9653	Peered Reviewed
159	Analysis of vertical axis wind solar hybrid power system	Dr. V. L. Bhambere	Mechanical Engineering	International Journal of research in Electronics and Computer Engineering Vol. 6 Issue 3	Sep-18	ISSN: 2393-9028	Peered Reviewed
160	Analysis of vertical axis wind solar hybrid power system	Prof. Prashant Raut	Mechanical Engineering	International Journal of research in Electronics and Computer Engineering Vol. 6 Issue 3	Sep-18	ISSN: 2393-9028	Peered Reviewed




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161	Analysis of vertical axis wind solar hybrid power system	Prof. Sumit K Wagh	Mechanical Engineering	International Journal of research in Electronics and Computer Engineering Vol. 6 Issue 3	Sep-18	ISSN: 2393-9028	Peered Reviewed
162	Review of Computational Fluid Dynamics Analysis of Helical Coil Heat Exchanger	Dr. V. L. Bhambere	Mechanical Engineering	Journal of emerging technologies and innovative research (JETIER) Vol. 6 Issue 6	Jun-19	ISSN:2349-5162	Peered Reviewed
163	Review of Computational Fluid Dynamics Analysis of Helical Coil Heat Exchanger	Prof. Prashant Raut	Mechanical Engineering	Journal of emerging technologies and innovative research (JETIER) Vol. 6 Issue 6	Jun-19	ISSN:2349-5162	Peered Reviewed
164	Review of Computational Fluid Dynamics Analysis of Helical Coil Heat Exchanger	Prof. Sumit K Wagh	Mechanical Engineering	Journal of emerging technologies and innovative research (JETIER) Vol. 6 Issue 6	Jun-19	ISSN:2349-5162	Peered Reviewed
165	A Review Experimental Investigation of Vortex Tube As	Prof.R.R.Mishra	Mechanical Engineering	International Journal of Research In Science	Jun-18	ISSN:2412-4389	Peered Reviewed
166	Power Harvesting from Mechanical Vibrations in Footwear Shoes	Prof. Dr. V. G. Neve	Electrical Engineering	Global Journal of Engineering Science, & Social Science Studies	Jun-19	ISSN:0975-9646	Peered Reviewed




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167	Fault Detection in Three Phase Transmission Line by Using Artificial Neural Network	Prof. Dr. V. G. Neve	Electrical Engineering	Global Journal of Engineering Science, & Social Science Studies	Jun-19	ISSN:0975-9646	Peered Reviewed
168	Review on Railway Track Crack Fault Detection by using IOT	Prof. Ekeshwari A. Rangari	Electrical Engineering	International Journal of Research in Computer & Information Technology (IJRCIT)	Mar-19	ISSN:2455-6491	Peered Reviewed
169	Railway Track Crack Detection by using IOT	Prof. Ekeshwari A. Rangari	Electrical Engineering	International Journal of Advanced Innovative Technology in Engineering (IJAITE)	Mar-19	e-ISSN: 2455-6491	Peered Reviewed
170	Power Harvesting from Mechanical Vibrations in Footwear Shoes	Prof. Ekeshwari A. Rangari	Electrical Engineering	Global Journal of Engineering Science, & Social Science Studies (GJESSSS)	Jun-19	ISSN:0975-9646	Peered Reviewed
171	Monitoring of Transformer Parameters using IOT in Smart Grid	Prof. Manjusha D. Hedau	Electrical Engineering	International Journal of Research in Advent Technology (IJRAT)	Apr-19	ISSN:2277-9477	Peered Reviewed
172	Voltage Sag Mitigation by using Integrated Nine Switch Power Conditioners	Prof. Pravin S. Wankhade	Electrical Engineering	International Journal (IJECSCE)	May-19	ISSN:2277-9477	Peered Reviewed



173	Enhancement of Power Quality by using Integrated Nine Switch Power Conditioners	Prof. Pravin S. Wankhade	Electrical Engineering	International Journal of Advanced Innovative Technology in Engineering (IJAITE)	May-19	ISSN:2455-6491	Peered Reviewed
174	Automatic Under and Over Voltage Protection	Prof. P. H. Kadam	Electrical Engineering	International Journal of Advanced Innovation Technology in Engineering (IJAITE)	Mar-19	ISSN:2455-6491	Peered Reviewed
175	Literature Review on Automatic Under and Over Voltage Protection	Prof. P. H. Kadam	Electrical Engineering	International Journal of Research in Computer & Information Technology (IJRCIT)	Mar-19	ISSN:2455-6491	Peered Reviewed
176	Synthesis and Characterization of Poly m-toludine–Ce metal composite	Dr. M. B. Wasu	First Year Engineering	Global Journal of Engineering, Science & Social Science Studies, Volume 05, Issue 06	Jun-19	ISSN:0975-9646	Peered Reviewed
177	Synthesis and Characterization of Poly m-toludine–Ce metal composite	Prof. M. D. Wasim	First Year Engineering	Global Journal of Engineering, Science & Social Science Studies, Volume 05, Issue 07	Jun-19	ISSN:0975-9646	Peered Reviewed




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178	Arduino Based Wireless Vacuum Cleaner with Load Carrier	Prof. A. M. Dhore	Computer Engineering	International Journal of Research in Advent Technology	Apr-19	ISSN: 2321-9637	Peered Reviewed
179	A Survey on Android Based Student Information System For Educational Institute	Prof.Sachin A. Murab	Computer Engineering	Journal of Emerging Technologies and Innovative Research (JETIR)	Jun-19	ISSN:2454-132X	UGC Reviewed
180	Data Acquisition And Storage System For Corporate Database Using Big Data	Prof.Sachin A. Murab	Computer Engineering	Journal of Emerging Technologies and Innovative Research (JETIR)	Jun-19	ISSN:2454-132X	UGC Reviewed
181	Arduino based smart street light system with accident avoidance in U-turns	Prof.R.S.Sawant	Computer Engineering	International Journal of Advance Research, Ideas and Innovations in Technology	Jun-19	ISSN:2454-132X	Peered Reviewed
182	Classification Of Sonar Images Using Neural Network Algorithm: A Review	Dr.Hemant M. Baradkar	Electronics & Telecommunication Engineering	International Journal of Innovative Research in Computer	2018	ISSN(Online): 2320-9801	Peered Reviewed
183	Classification Of Sonar Images Using Neural Network Algorithm	Dr.Hemant M. Baradkar	Electronics & Telecommunication Engineering	International Journal of Creative Research Thoughts (IJCRT)	2018	ISSN: 2320-2882	Peered Reviewed




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184	An Augmented Reality Application For Learning Practical Lab Equipment	Dr. A. D. Shelotkar	Electronics and Telecommunication Engineering	International Journal of Advanced Innovative Technology in Engineering (IJAITE), Vol. 3, Issue 3, May-2018	2018	ISSN:2455-6491	Peered Reviewed
185	An Augmented Reality Application For Learning Practical Lab Equipments	Prof. SWAPNIL RAJURKAR	Electronics and Telecommunication Engineering	International Journal of Advanced Innovative Technology in Engineering (IJAITE), Vol. 3, Issue 3, May-2018	2018	ISSN:2455-6491	Peered Reviewed
186	Literature Review On Multiple Object Detection And Object Recognition In Video	Dr. A. D. Shelotkar	Electronics and Telecommunication Engineering	International Journal of Advanced Innovative Technology in Engineering (IJAITE), Vol. 3, Issue 3, May-2018	2018	ISSN:2455-6491	Peered Reviewed
187	Literature Review On Multiple Object Detection And Object Recognition In Video	Prof. SWAPNIL RAJURKAR	Electronics and Telecommunication Engineering	International Journal of Advanced Innovative Technology in Engineering (IJAITE), Vol. 3, Issue 3, May-2018	2018	ISSN:2455-6491	Peered Reviewed




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188	Review Paper On Development Of Smart Stick For Blind People Using Gps &Gsm Module Without Any Human Assistance	Dr. A. D. Shelotkar	Electronics and Telecommunication Engineering	International Journal of Advanced Innovative Technologyin Engineering (IJAITE), Vol. 3, Issue 3, May-2018	2018	ISSN:2455-6491	Peered Reviewed
189	Development Of Smart Stick For Blind People Using Gps & Gsm Module Without Any Human Assistance	Dr. A. D. Shelotkar	Electronics and Telecommunication Engineering	International Journal of Advanced Innovative Technology in Engineering (IJAITE), Vol. 3, Issue 3, May-2018	2018	ISSN:2455-6491	Peered Reviewed
190	Review paper on Development of Smart Stick for Blind People using GPS and GSM Module without any Human Assistance	Dr. A. D. Shelotkar	Electronics & Telecommunication Engineering	International Journal of Advanced Innovative Technology in Engineering, Vol 3 issue 3	2018	ISSN : 2455-6491	Peered Reviewed
191	Development of Smart Stick for Blind People using GPS and GSM Module without any Human Assistance	Dr. A. D. Shelotkar	Electronics & Telecommunication Engineering	International Journal of Advanced Innovative Technology in Engineering, Vol 3 issue 3	2018	ISSN : 2455-6491	Peered Reviewed




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192	Investigation On Biogas Generation & Waste Minimization Using Rice Husk (Biomass) & Kitchen	Prof. A.R. Rode	CIVIL ENGG	International Journal of Advance Research in Science and Engineering, olume No.06, Special Issue No.(01), Dec 2017, ICASES-17	2018	ISSN(P):2319-8346	Peered Reviewed
193	Cloud Seeding Technology	Prof. A.R. Rode	CIVIL ENGG	International Journal for Engineering Applications and Technology, Issue 9 vol 3, ISSN: 2321-8134	2018	ISSN(P):2321-8134	Peered Reviewed
194	Investigation On Biogas Generation And Waste Minimization From Cow Dung By Anaerobic Digestion	Prof. A.R. Rode	CIVIL ENGG	International Journal of Research in Advent Technology, Vol.5, No.9, September 2017	2018	ISSN 2321-9637	Peered Reviewed
195	Performance Based Seismic Design Of Rcc Building	Prof.C.S. Ingale	CIVIL ENGG	International Research Journal of Engineering and Technology, Volume: 04 Issue: 10 Oct -2017	2018	e-ISSN: 2395-0056 p-ISSN: 2395-0072	Peered Reviewed
196	Comparative Study Of Rcc And Prestressed Concrete Frame	Prof. V.D. Dhore	CIVIL ENGG	International Journal for Science and Advance Research In Technology	2018	ISSN [ONLINE]: 2395-1052	Peered Reviewed




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197	Critical study of seismic analysis of multi-storey building with & without floating column	Prof. V.R. Bankar	CIVIL ENGG	International Journal for Engineering Applications and Technology	2018	ISSN [ONLINE]:2321-8134	Peered Reviewed
198	Experimental Study On Replacement Of Natural Sand With Artificial Sand Cement Concrete	Prof. V.R. Bankar	CIVIL ENGG	International Journal for Engineering Applications and Technology	2018	ISSN [ONLINE]:2321-8134	Peered Reviewed
199	Performance Based Seismic Design Of Rcc Building	Prof. M.R. Nalamwar	CIVIL ENGG	International Research Journal of Engineering and Technology	2018	e-ISSN: 2395-0056 p-ISSN: 2395-0072	Peered Reviewed
200	Review on self curing concrete using poly-ethylene glycol in cement concrete	Prof. S.R. Raut	CIVIL ENGG	International Journal for Engineering Applications and Technology	2018	ISSN [ONLINE]:2321-8134	Peered Reviewed
201	Experimental Study On Replacement Of Natural Sand With Artificial Sand Cement Concrete	Prof. S.R. Raut	CIVIL ENGG	International Journal for Engineering Applications and Technology	2018	ISSN [ONLINE]:2321-8134	Peered Reviewed
202	Experimental Study On Utilization Of E-Waste In Cement Concrete	Prof. S.R. Raut	CIVIL ENGG	International Journal for Engineering Applications and Technology	2018	ISSN [ONLINE]:2321-8134	Peered Reviewed
203	Experimental Study On Utilization Of E-Waste In Cement Concrete	Prof. S.R. Raut	CIVIL ENGG	International Journal of Engineering and Science	2018	ISSN(E)2319-1813, ISSN(P)28-19-1805	Peered Reviewed




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204	Use Of Industrial Waste In Flexible Pavement	Prof. A.K Gahalod	CIVIL ENGG	International Journal for Engineering Applications and Technology	2018	ISSN [ONLINE]:2321-8134	Peered Reviewed
205	Experimental Study On Replacement Of Natural Sand With Artificial Sand Cement Concrete	Prof. A.K Gahalod	CIVIL ENGG	International Journal for Engineering Applications and Technology	2018	ISSN [ONLINE]:2321-8134	Peered Reviewed
206	Experimental Study On Utilization Of E-Waste In Cement Concrete	Prof. A.K Gahalod	CIVIL ENGG	International Journal for Engineering Applications and Technology	2018	ISSN [ONLINE]:2321-8134	Peered Reviewed
207	Stabilization of black cotton soil by using waste fibre & lime	Prof. A.K Gahalod	CIVIL ENGG	International Journal for Engineering Applications and Technology	2018	ISSN [ONLINE]:2321-8134	Peered Reviewed
208	Modified multi-media filter for domestic wastewater treatment	Prof. A.K Gahalod	CIVIL ENGG	INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS	2018	ISSN: 2320-2882	Peered Reviewed
209	Comparative study of RCC and pre-stressed concrete one way continuous slab for various spans	Prof. V.D. Dhore	CIVIL ENGG	International Journal for Engineering Applications and Technology	2018	ISSN [ONLINE]:2321-8134	Peered Reviewed




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210	Utilization of phase change material in building construction	Prof. M.G. Mandaokar	CIVIL ENGG	International Journal for Engineering Applications and Technology	2018	ISSN [ONLINE]:2321-8134	Peered Reviewed
211	Experimental Study On Utilization Of E-Waste In Cement Concrete	Prof. M.G. Mandaokar	CIVIL ENGG	International Journal for Engineering Applications and Technology	2018	ISSN [ONLINE]:2321-8134	Peered Reviewed
212	2.4 kW Three-Phase Inverter for Aircraft Application-Hardware Implementation	Prof. Ruchi M. Pachagade	Electrical Engg.	Springer Nature Singapore Pte Ltd. 2018s	2018	DOI:10.1007/978-981-10-4394-9_33	Peered Reviewed
213	Modelling and Simulation of THC for BLDC Motor Drive	Prof. Aboli Vijay Mohitkar	Electrical Engg.	International Journal of Electronics, Communication & Soft Computing Science and Engineering	2018	ISSN: 2277-9477, Volume 4, Issue 4	Peered Reviewed
214	Power Quality Improvement By Using Upqc In Grid Connected Solar Pvpanel & Dfig Wind Farm	Prof. PRIYANKA H. KADAM	Electrical Engg.	International Journal Advanced Innovative Technologyin Engineering (IJAITE), Vol. 3, Issue 3, May-2018	2018	ISSN:2455-6491	Peered Reviewed
215	Design of Automatic Solar Based Grass Cutter by Using Android Application	Prof. Chetan W. Jadhao	Electrical Engg.	International Journal of Innovations & Advancement in Computer Science IJIACS	2018	ISSN 2347 – 8616 Volume 7, Issue 3	Peered Reviewed




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216	A Game Theoretical Approach for Intrusion Detection Technique in Mobile Ad Hoc Networks	Prof. P.D.Thakare	Computer Engineering Department	International Journal of Research in Advent Technology, Vol.6, No.2,	2018	E-ISSN: 2321-9637	Peered Reviewed
217	A Novel Technique For Efficient Usage Of Intrusion Detection System In Mobile Ad Hoc Networks	Prof. P.D.Thakare	Computer Engineering Department	World Journal of Engineering Research and Technology WJERT, Vol. 4, Issue 1, 452-461.	2018	ISSN 2454-695X	Peered Reviewed
218	A Case Study Of Reducing Coal Consumption Of Cogeneration Power Plant	Dr.V.L.Bhambere	Mechanical Engineering	International Journal of Research in advent Technology	2018	e-issn:2321-9637	Peered Reviewed
219	A Review on Finite Element Analysis of Curved Plate Overlapping Welded Joint	Prof. Amol. B. Dhumne	Mechanical Engineering	IJSRD - International Journal for Scientific Research & Development Vol. 3, Issue 02, 2015 ISSN (online): 2321-0613	2018	ISSN (online): 2321-0613	Peered Reviewed




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220	A Review on Finite Element Analysis of Curved Plate Overlapping Welded Joint	Prof. Amol. B. Dhumne	Mechanical Engineering	IJSRD - International Journal for Scientific Research & Development Vol. 3, Issue 02, 2015 ISSN (online): 2321-0613	2018	ISSN (online): 2321-0613	Peered Reviewed
221	A Review on Finite Element Analysis of Curved Plate Overlapping Welded Joint	Prof. Kanchan D. Jaysingpure	Mechanical Engineering	IJSRD - International Journal for Scientific Research & Development Vol. 3, Issue 02, 2015 ISSN (online): 2321-0613	2018	ISSN (online): 2321-0613	Peered Reviewed
222	An Intelligent Highway Vehicular Systems Survey In Traffic Controlling	Prof. A. A. Chincholkar	Electronics & Telecommunication Engineering	International Journal of Advanced Innovative Technology In Engineering, Vol. 2, Issue 2.	2017	ISSN: 2455-6491	Peered Reviewed
223	Literature Review on Image Media Diversity in a Security Survival for Digital Image Sharing Schemes	Prof. Ekeshwari A. Rangari	Electrical Engg.	International Journal of Advanced Research in Science, Engineering & Technology (IJARSET)	2017	ISSN: 2350-0328 Vol. 4, Issue 1	Peered Reviewed




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224	Image Media Diversity in a Security Survival for Digital Image Sharing Schemes	Prof. Ekeshwari A. Rangari	Electrical Engg.	International Journal of Research in Advent Technology (IJRAT)	2017	E-ISSN: 2321-9637 Vol. 5, No. 2	Peered Reviewed
225	Mitigation of Unbalanced Voltage Sag by using Custom Power Devices	Prof. Pallavi V. Pullawar	Electrical Engg.	International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering (IJIREICE), Vol. 5, Issue 1	2017	ISSN(Online): 2321-2004, ISSN(Print): 2321-5526	Peered Reviewed
226	Development in Energy Harvesting System using Escalator & Four Way Door Mechanism	Prof. Pallavi V. Pullawar	Electrical Engg.	International Journal of Advanced Research in Science, Engineering & Technology (IJARSET)	2017	ISSN(Online): 2350-0328 Vol. 4, Issue 4	Peered Reviewed
227	FACTS Devices Placement Using Sensitivity Indices Analysis Method	Prof. Ankit A. Zade	Electrical Engg.	International Research Journal of Engineering & Technology (IRJET)	2017	e-ISSN: 2395-0056 p-ISSN: 2395-0072	Peered Reviewed
228	Detection of Power Grid Synchronization Failure by Sensing Bad Voltage and Frequency	Prof. Ankit A. Zade	Electrical Engg.	International Research Journal of Engineering & Technology (IRJET)	2017	e-ISSN: 2395-0056 p-ISSN: 2395-0072	Peered Reviewed




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229	“Results Of Modelling And Simulation Of The For Bldc Motor Drive Using Pi Controller”	Prof. ABOLI VIJAY MOHITKAR	Electrical Engg.	International Journal of Advanced Innovative Technology in Engineering (IJAITE), Vol. 2 , Issue 5, Sept-2017	2017	ISSN: 2455-6491	Peered Reviewed
230	Mobile Messaging Application Framework for Service Usage Categorization	Prof. A.V. Mahalle	Computer Engineering Department	International Journal of Research in Science & Engg. ISSN 2394-8280 Vol 3 Issue 4, July Aug 2017	2017	ISSN 2394-8280	Peered Reviewed
231	Trust and Iterative Filtering Approaches for Secure Data Collection in /wireless Sensor Networks	Prof. A.V. Mahalle	Computer Engineering Department	International Journal of Research in Science & Engg. ISSN- 2394-8299 vol 3 Issue 4 July aug 2017	2017	ISSN- 2394-8299	Peered Reviewed
232	HLA Based solution For Packet Loss Detection in Mobile Adhoc Networks	Prof. A.V. Mahalle	Computer Engineering Department	International Journal of Research in Research & Engg. ISSN 2394-8280 Vol 3 Issue 4, July aug 2017	2017	ISSN 2394-8280	Peered Reviewed
233	A Review on Bearings of Casting Shakeout	Prof. Megha S. Londhekar	Mechanical Engineering	IJRST –International Journal for Innovative Research in Science & Technology	2017	ISSN: 2349-6010	Peered Reviewed




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234	A Review On Wood Article Duplicator Carving Machine Technique	Prof. P. S. Biskey	Mechanical Engineering	IJRISE -International Journal of Research In Science & Engineering Volume: 3 Issue: 5 Sep-Oct 2017 Page 200-205	2017	e-ISSN: 2394-8299 p-ISSN: 2394-8280	Peered Reviewed
235	Rapid Prototyping Technology: Fused Deposition Modeling Using Finite Element Method. A Review	Prof. R. J. Pardhi	Mechanical Engineering	IJRISE -International Journal of Research In Science & Engineering Volume: 3 Issue: 5 Sep-Oct 2017 Page 194 - 199	2017	e-ISSN: 2394-8299 p-ISSN: 2394-8280	Peered Reviewed
236	Design and Flow Analysis of Radial Turbine	Prof. V. D. Vattamwar	Mechanical Engineering	IJFEAT-International Journal for Engg. Application & Tech. Volume 3 Issue 9	2017	e-ISSN: 2321-8134	Peered Reviewed
237	Survey on Route Optimization Mechanism in Network Mobility	Dr. A. D. Shelotkar	Electronics & Telecommunication Engineering	International Journal of Engineering Development & Research, Volume 5, Issue 3.	2017	ISSN: 2321-9939	Peered Reviewed




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238	Heart Beat Rate Monitoring System Using GSM	Dr. A. D. Shelotkar	Electronics & Telecommunication Engineering	International Journal of Electronics, Communication & Soft Computing Science & Engineering, Volume 4, Issue 4.	2017	ISSN: 2277-9477	Peered Reviewed
239	Heart Beat Rate Monitoring Using Microcontroller	Dr. A. D. Shelotkar	Electronics & Telecommunication Engineering	International Journal of Electronics, Communication & Soft Computing Science & Engineering, Volume 4, Issue 4.	2017	ISSN: 2277-9477	Peered Reviewed
240	Survey on Route Optimization Mechanism in Network Mobility	Prof. V. K. Barbudhe	Electronics & Telecommunication Engineering	International Journal of Engineering Development & Research, Volume 5, Issue 3.	2017	ISSN: 2321-9939	Peered Reviewed
241	Literature Review on Image Media Diversity in a Security Survival for Digital Image Sharing Schemes	Prof. V. K. Barbudhe	Electronics & Telecommunication Engineering	International Journal of Advanced Research in Science, Engineering & Technology Vol. 4, Issue 1.	2017	2350- 0328	Peered Reviewed




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242	Compromise Resilient En-Route Filtering Against False Data Attacks Networked Systems	Prof. V. K. Barbudhe	Electronics & Telecommunication Engineering	International Journal of Advanced Innovative Technology in Engineering (IJAITE), Vol. 2, Issue 3.	2017	2455-6491	Peered Reviewed
243	Image Media Diversity in a Security Survival for Digital Image Sharing Schemes	Prof. V. K. Barbudhe	Electronics & Telecommunication Engineering	International Journal of Research in Advent Technology, Vol.5, No.2.	2017	E-2321-9637	Peered Reviewed
244	Reversible Color Transformation: Method To Secure Secret Image By Transforming Into Secret Fragment Visible Mosaic Image	Prof. V. K. Barbudhe	Electronics & Telecommunication Engineering	Int. Journal of Engineering Research and Application , Vol. 7, Issue 1, (Part -4), pp.01-04	2017	2248-9622	Peered Reviewed
245	Development of Automated System for Measurement & Analysis of Gestational Age for Monitoring Fetal Growth	Prof. V. K. Barbudhe	Electronics & Telecommunication Engineering	International Journal of Research In Science & Engineering Special Issue 6.	2017	e-2394-8299	Peered Reviewed




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246	A Case study of En-Route Filtering Scheme Against False Data Injection Attacks in Cyber-Physical Networked Systems	Prof. V. K. Barbudhe	Electronics & Telecommunication Engineering	International Journal on Recent and Innovation Trends in Computing & Communication Volume: 4 Issue: 1	2017	2321-8169	Peered Reviewed
247	Design & Implementation of Butterworth Filter for Noise Detection in Speech Signal	Prof. V. K. Barbudhe	Electronics & Telecommunication Engineering	International Journal of Advanced Innovative Technology in Engineering, Vol. 2, Issue 2.	2017	2455- 6491	Peered Reviewed
248	Design & Implementation of Butterworth Filter for Noise Detection in Speech Signal	Prof. V. K. Barbudhe	Electronics & Telecommunication Engineering	International Journal of Advanced Innovative Technology in Engineering, Vol. 2, Issue 3.	2017	2455-6491	Peered Reviewed
249	Error Concealment for Recovery of Corrupted Image Using Forward Error Correction Interpolation Technique	Prof. V. K. Barbudhe	Electronics & Telecommunication Engineering	International Journal of Research in Computer & Information Technology, Vol. 2, Issue 2.	2017	2455-3741	Peered Reviewed




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250	Floating Point Alu 32 Bit Using Vhdl Simulation”	Prof. V. K. Barbudhe	Electronics & Telecommunication Engineering	International Journal of Advanced Innovative Technology in Engineering, Vol. 2, Issue 2.	2017	2455-3743	Peered Reviewed
251	Implementation of Butterworth Filter for Noise Detection in Speech Signal	Prof. V. K. Barbudhe	Electronics & Telecommunication Engineering	International Journal of Advanced Innovative Technology in Engineering, Vol. 2, Issue 3.	2017	2455-6491	Peered Reviewed
252	Polynomial Based Compromise Resilient En-Route Filtering Scheme Against False Data Attacks Networked Systems	Prof. V. K. Barbudhe	Electronics & Telecommunication Engineering	International Journal of Electronics, Communication & Soft Computing Science and Engineering, Volume 4, Issue 4	2017	2277-9477	Peered Reviewed
253	Bluetooth Aided Safety Band For Women’s Using Smartphone	Prof. R. M. Shah	Electronics & Telecommunication Engineering	International Journal of Advanced Innovative Technology in Engineering, Vol. 2, Issue 3.	2017	2455-6491	Peered Reviewed
254	Advance Woman Security System Based on Android	Prof. R. M. Shah	Electronics & Telecommunication Engineering	International Journal of Advanced Innovative Technology in Engineering, Vol. 2, Issue 3.	2017	2455-6491	Peered Reviewed




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255	Model Study of Tour Planning for Mobile Data Gathering Mechanism in WSN	Prof. R. M. Shah	Electronics & Telecommunication Engineering	International Journal of Current Engineering & Technology	2017	E-2277 – 4106, P-2347 – 5161	Peered Reviewed
256	Automatic street light control using zigbee	Prof S. S. Rajurkar	Electronics & Telecommunication Engineering	International journal of research in science & engineering	2017	E-2394-8299	Peered Reviewed
257	Texture Analysis of Thyroid Ultrasound Images for Diagnosis of Cancerous Nodule Using ART1 Neural Network	Prof. S. D. Kale	Electronics & Telecommunication Engineering	International Journal of Advanced Research in Electrical, Electronics & Instrumentation Engineering, Vol. 6, Issue 4, PP.2383-2390. (DOI:10.15662/IJAR EEIE.2017.0604014)	2017	2278- 8875	Peered Reviewed




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258	Texture Analysis of Thyroid Ultrasound Images for Diagnosis of Cancerous Nodule Using ART1 Neural Network	Prof. A. R. Dudhe	Electronics & Telecommunication Engineering	International Journal of Advanced Research in Electrical, Electronics & Instrumentation Engineering, Vol. 6, Issue 4, PP.2383-2390. (DOI:10.15662/IJAR EEIE.2017.0604014)	2017	2278- 8875	Peered Reviewed
259	IP Subnetting	Prof. V. K. Barbudhe	Electronics & Telecommunication Engineering	International Journal of Electronics, Communication & Soft Computing Science and Engineering , Volume 2, Issue 5	2017	2277- 9477	Peered Reviewed
260	A Real Time Implementation of Microcontroller Based Propeller Clock	Prof. A. A. Chincholkar	Electronics & Telecommunication Engineering	International Journal of Current Engineering and Technology	2017	ISSN(E)2277-4106,(P)2347-5161	Peered Reviewed
261	Heart Beat Rate Monitoring System Using GSM	Prof. A. A. Chincholkar	Electronics & Telecommunication Engineering	International Journal of Electronics, Communication & Soft Computing Science & Engineering, Volume 4, Issue 4.	2017	ISSN: 2277-9477	Peered Reviewed




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262	Heart Beat Rate Monitoring Using Microcontroller	Prof. A. A. Chincholkar	Electronics & Telecommunication Engineering	International Journal of Electronics, Communication & Soft Computing Science & Engineering, Volume 4, Issue 4.	2017	ISSN: 2277-9477	Peered Reviewed
263	Application of CFD software for planning and design of civil engineering structures.	Prof. M. R. Nalamwar	CIVIL ENGG	Research Journal Engineering Science.	2017	ISSN 2278 – 9472	Peered Reviewed
264	Review on Earthquake Resistance Techniques	Prof. P. K. Pardakhe	CIVIL ENGG	International Journal Of Research In Science & Engineering	2017	e-ISSN:2394-8299 p-ISSN:2394-8280	Peered Reviewed
265	Review On Condition Assessment And N.D.T. Of Building.	Prof. M. R. Bhatkar	CIVIL ENGG	International Journal for Science and Advance Research In Technology	2017	ISSN [ONLINE]: 2395-1052	Peered Reviewed
266	Condition Assessment And NDT Of Building	Prof. M. R. Bhatkar	CIVIL ENGG	International Journal for Science and Advance Research In Technology	2017	ISSN [ONLINE]: 2395-1052	Peered Reviewed
267	A Review On Proposed E-Voting System.	Prof. P.D.Thakare	Computer Engineering Department	International Journal of Advanced Innovative Technology in engineering (IJAITE), Vol 2, Issue 3, May-2017	2017	ISSN: 2394-8280	Peered Reviewed




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268	Review on Improving Efficiency of High Utility Sequential Pattern	Prof. S.A.Murab	Computer Engineering Department	International Journal of Research in Advent Technology, Vol.5, No.3, E-ISSN: 2321-9637 Available online at www.ijrat.org, March 2017	2017	ISSN: 2321-9637	Peered Reviewed
269	Novel Method for Improving Efficiency of High Utility Sequential Pattern	Prof. S.A.Murab	Computer Engineering Department	International Journal of Advent Research in Computer and Electronics (IJARCE) Vol. 4, No.3, E-ISSN: 2348-5523, April 2017	2017	E-ISSN: 2348-5523	Peered Reviewed
270	An Imperial Study on Efficient and Reliable Ranked Keyword search Method	Prof. S.A.Murab	Computer Engineering Department	International Journal of Research in Advent Technology, Vol.5, No.4, E-ISSN: 2321-9637 Available online at www.ijrat.org, April 2017	2017	ISSN: 2321-9637	Peered Reviewed
271	A New Fuzzy Based Ensemble Classifier for analysis of ECG Signal	Prof. S.A.Murab	Computer Engineering Department	International Journal of Research in Applied science & Engg Technology (IJRASET) Vol 5 Issue \$ April 2017, ISSN 2321-9653	2017	ISSN 2321-9653	Peered Reviewed




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272	A Novel Approach of Inferring and Retrieving Data Imputation	Prof. S.A.Murab	Computer Engineering Department	International Journal of Advent Research in Computer and Electronics (IJARCE) Vol. 4, No.3, E-ISSN: 2348-5523 19 ,April 2017	2017	ISSN: 2348-5523	Peered Reviewed
273	Review on Interactive Retrieving-Inferring Data Imputation Approach	Prof. S.A.Murab	Computer Engineering Department	International Journal of Research in Advent Technology, Vol.5, Issue 3, E-ISSN: 2321-9637 Available online at www.ijrat.org, March 2017	2017	E-ISSN: 2321-9637	Peered Reviewed
274	“Comparison of Routing Protocols Based on MANET”	Prof. R.S. Sawant	Computer Engineering Department	International Journal for Research in Emerging Science and Technology, IJREST ISSN 2454-664X	2017	ISSN 2454-664X	Peered Reviewed
275	Compromise Resilient EN-Route Filtering Against False Data attacks Networked Systems	Prof. A.V. Mahalle	Computer Engineering Department	International Journal of advanced Innovative Technology in engg. (IJATE) ISSN: 2455-6491 Vol 2, Issue 3,May 2017	2017	ISSN: 2455-6491	Peered Reviewed




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276	A Review On Proposed E-Voting System.	Prof. A. M. Dhore	Computer Engineering Department	International Journal of Advanced Innovative Technology in engineering (IJAITE), Vol 2, Issue 3, May-2017	2017	ISSN 2394-8280	Peered Reviewed
277	“Comparison Of Routing Protocols Based On MANET”	Prof. S.D. Pandao	Computer Engineering Department	International Journal for Research in Emerging Science and Technology, IJREST ISSN 2454-664X	2017	ISSN 2454-664X	Peered Reviewed
278	A Survey on Data Mining Approaches for Network Intrusion Detection System	Prof. M.G.Ingle	Computer Engineering Department	International Journal of Computer Applications (0975 – 8887) Volume 159 – No 1, February 2017	2017	0975 – 8887	Peered Reviewed
279	An Imperial Study on Efficient and Reliable Ranked Keyword Search Method	Prof. M.G.Ingle	Computer Engineering Department	International Journal of Research in Advent Technologies Vol.5, No.4, E-ISSN: 2321-9637. Available online at www.ijrat.org, April 2017	2017	E-ISSN: 2321-9637	Peered Reviewed




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280	A Survey On Efficient And Reliable Ranked Keyword Search Method	Prof. M.G.Ingle	Computer Engineering Department	International Journal of Research in Advent Technologies Vol.5, No.4, E-ISSN: 2321-9637. Available online at www.ijrat.org, April 2017	2017	E-ISSN: 2348-5523	Peered Reviewed
281	HLA Based solution For Packet Loss Detection in Mobile Adhoc Networks	Prof. M.G.Ingle	Computer Engineering Department	International Journal of Research in Science & Engg. ISSN 2394-8280 Vol 3 Issue 4, July aug 2017	2017	ISSN 2394-8280	Peered Reviewed
282	Trust and Iterative Filtering Approaches for Secure Data Collection in /wireless Sensor Networks	Prof. M.G.Ingle	Computer Engineering Department	International Journal of Research in Science & Engg. ISSN- 2394-8299 vol 3 Issue 4 July aug 2017	2017	ISSN- 2394-8299	Peered Reviewed
283	Mobile Messaging Application Framework for Service Usage Categorization	Prof. M.G.Ingle	Computer Engineering Department	International Journal of Research in Science & Engg. ISSN 2394-8280 Vol 3 Issue 4, July Aug 2017	2017	ISSN 2394-8280	Peered Reviewed




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284	A Survey on Data Mining Approaches for Network Intrusion Detection System	Prof. R.V. Deshmukh	Computer Engineering Department	International Journal of Computer Applications (IJCA) (0975 – 8887) Volume 159 – No 1, February 2017.	2017	0975 – 8887	Peered Reviewed
285	A Survey on Data Mining Approaches for Network Intrusion Detection System	Prof.A.A. Kolpyakwar	Computer Engineering Department	International Journal of Computer Applications (0975 – 8887) Volume 159 – No 1, February 2017	2017	0975 – 8887	Peered Reviewed
286	Comparison of Routing Protocols Based on MANET	Prof. P.D.Thakare	Computer Engineering Department	International Journal for Research in Emerging Science and Technology IJREST ISSN 2454-664X, 01/02/2017	2017	ISSN 2454-664X	Peered Reviewed
287	Review On Wind-Solar Hybrid Power System	Prof. S.K.Wagh	Mechanical Engineering	International Journal of Research In Science & Engineering, Volume: 3 Issue:2	2017	e-ISSN: 2394-8299 p-ISSN: 2394-8280	Peered Reviewed
288	The Hybrid Solar and Wind Power Extraction for	Prof. S.K.Wagh	Mechanical Engineering	International Journal of Research in Advent Technology, Vol.5, No.3,	2017	E-ISSN: 2321-9637	Peered Reviewed




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289	Ummary Of Environmentally Friendly Turbine Design Concepts	Prof.S.A. Ajmire	Mechanical Engineering	International Journal Of Research in Science & Engg. (IJRISE),Vol.03,Issue:02,	2017	e-ISSN: 2394-8299	Peered Reviewed
290	Night Vision System In Car	Prof.S.A. Ajmire	Mechanical Engineering	International Journal Of Research in Science & Engg. (IJRISE),Vol.03,Issue:02,	2017	e-ISSN: 2394-8299	Peered Reviewed
291	Analysis Of Supercritical Boiler	Prof.S.A. Ajmire	Mechanical Engineering	International Journal Of Research in Science & Engg. (IJRISE),Vol.03,Issue:02, April-2017	2017	e-ISSN: 2394-8299	Peered Reviewed
292	Thermoacoustic Refrigeration	Prof.S.A. Ajmire	Mechanical Engineering	International Journal Of Research in Science & Engg. (IJRISE),Vol.03,Issue:02, April-2017	2017	e-ISSN: 2394-8299	Peered Reviewed
293	Performance Analysis of Secure Route Optimization Protocol	Prof. V. K. Barbudhe	Electronics & Telecommunication Engineering	International Journal of Engineering Science and Computing,	2016	ISSN: 2455-6491 Vol. 1, Issue 4	Peered Reviewed
294	Power Quality Enhancement By An Application Of Dvr	Dr. Vijay G. Neve	Electrical Engg.	International Journal of Advanced Innovative Technology in Engineering (IJAITE)	2016	ISSN: 2455-6491 Vol. 1, Issue 4	Peered Reviewed




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295	Characterization of Voltage Dips Due to Faults	Dr. Vijay G. Neve	Electrical Engg.	International Journal of Research in Advent Technology (IJRAT)	2016	E-ISSN: 2321-9637 Vol. 4, Issue 7	Peered Reviewed
296	Robonoid Devices for Safety Purposes	Prof. Ekeshwari A. Rangari	Electrical Engg.	International Journal of Advanced Innovative Technology in Engineering (IJAITE)	2016	E-ISSN: 2321-9637 Vol. 4, Issue 7	Peered Reviewed
297	Power Quality Enhancement By An Application of DVR	Prof. Pallavi V. Pullawar	Electrical Engg.	International Journal of Advanced Innovative Technology in Engineering (IJAITE)	2016	ISSN: 2455-6491 Vol. 1, Issue 4	Peered Reviewed
298	Characterization of Voltage Dips Due To Faults	Prof. Pallavi V. Pullawar	Electrical Engg.	International Journal of Research in Advent Technology (IJRAT)	2016	ISSN: 2455-6491 Vol. 1, Issue 4	Peered Reviewed
299	Performance Improvement of BLDC Motor with Hystersis Current Controller Topology	Prof. Manjusha D. Hedau	Electrical Engg.	Imperial Journal of Interdisciplinary Research (IJIR)	2016	ISSN: 2454-1362 Vol. 2, Issue 10	Peered Reviewed




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300	Performance Improvement of BLDC Motor with Hysteresis Current Controller	Prof. Manjusha D. Hedau	Electrical Engg.	International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering (IJAREEIE)	2016	ISSN(Online): 2321-7054 ISSN(Print): 2321-5628 Vol. 4, Issue 9	Peered Reviewed
301	Mitigation of Unbalanced Voltage Sag by using Custom Power Devices	Prof. Manjusha D. Hedau	Electrical Engg.	International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering (IJIREEICE)	2016	ISSN(Online): 2321-2004 ISSN(Print): 2321-5526 Vol. 4, Issue 9	Peered Reviewed
302	Optimal Placement Of Thyristor Control Series Capacitor Using Reduction Of Total System Reactive Power Loss Sensitivity Indices Analysis Method	Prof. Ankit A. Zade	Electrical Engg.	International Journal of Advent Research in Computer and Electronics (IJARCE)	2016	e-ISSN: 2348-5523 Vol. 3, Issue 7	Peered Reviewed
303	Optimal Placement of FACTS Using Sensitivity Indices Analysis Method	Prof. Ankit A. Zade	Electrical Engg.	International Journal of Advanced Innovative Technology in Engineering (IJAITE)	2016	e-ISSN: 2348-5523 Vol. 3, Issue 7	Peered Reviewed




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304	Closer With Web Blocker	Prof. P.D.Thakare	Computer Engineering Department	International Journal of Research In Science & Engineering e-ISSN: 2394-8299 Volume: 2 Issue: 6 p-ISSN: 2394-8280 Nov 2016	2016	ISSN: 2394-8280	Peered Reviewed
305	ECG Signal Pre-processing, Decomposition & Detection of PQRST Index, Using MATLAB	Prof. P.D.Thakare	Computer Engineering Department	International Journal of Research In Science & Engineering e-ISSN: 2394-8299 Volume: 2 Issue: 6 p-ISSN: 2394-8280 Nov. 2016	2016	ISSN: 2394-8280	Peered Reviewed
306	Closer With Web Blocker	Prof. A. M. Dhore	Computer Engineering Department	International Journal of Research In Science & Engineering e-ISSN: 2394-8299 Volume: 2 Issue: 6 p-ISSN: 2394-8280 Nov. 2016	2016	ISSN: 2394-8280	Peered Reviewed




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307	ECG Signal Pre-processing, Decomposition & Detection of PQRST Index, Using MATLAB	Prof.A. M. Dhore	Computer Engineering Department	International Journal of Research In Science & Engineering e-ISSN: 2394-8299 Volume: 2 Issue: 6 p-ISSN: 2394-8280 Nov. 2016	2016	ISSN: 2394-8280	Peered Reviewed
308	“Experimental and Computational Analysis of Cylindrical Perforated Fins in Staggered Arrangement”	Prof. Ashish B. Samarth	Mechanical Engineering	International journal of Innovative and emerging research in engineering (IJIERE),Vol 3, Special Issue 1 ICSTSD 2016, Page No. 459-465	2016	ISSN:2394-5394	Peered Reviewed
309	Performance analysis Di-Ethyl Ether and Ter-Amy ethyl Ether blend with Diesel in CIDI-Engine:	Prof.P.H. Rathod	Mechanical Engineering	International Journal Of Research in Science & Engg. (IJRISE),Vol.02,Issue:	2016	E-ISSN:2394-8299 P-ISSN:2394-8280	Peered Reviewed
310	Solid waste management in Green Building	Prof. M. R. Nalamwar	CIVIL ENGG	Internation journal of research in engineering, science and Technologies	2016	2395-6453	Peered Reviewed
311	Optimum Building Orientation Study For Central India By Simulation.	Prof. M. R. Nalamwar	CIVIL ENGG	International Journal on Theoretical and Applied Research in Mechanical Engineering	2016	ISSN (Print): 2319-3182	Peered Reviewed




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312	Influence of Opening in Brick Infilled Wall on the Stiffness of RCC Frame	Prof. N.V. Bandwal	CIVIL ENGG	International journal of science, Engineering Technology research.	2016	ISSN: 2278 – 7798	Peered Reviewed
313	Comparative study of RCC structure for earthquake load using light weight building materials.	Prof. P. K. Pardakhe	CIVIL ENGG	International research journal of Engineering and Technology	2016	e-ISSN: 2395-0056 p-ISSN: 2395-0072	Peered Reviewed
314	Seismic analysis of RC Building with and without infilled walls	Prof. N. K. Meshram	CIVIL ENGG	International research journal of Engineering and Technology	2016	e-ISSN: 2395 -0056 p-ISSN: 2395-0072	Peered Reviewed
315	Earthquake resistant design of open ground storey frame building	Prof. N. K. Meshram	CIVIL ENGG	International research journal of Engineering and Technology	2016	e-ISSN: 2395 -0056 p-ISSN: 2395-0072	Peered Reviewed
316	Space Mouse	Prof. Ekeshwari A. Rangari	Electrical Engg.	International Journal of Research in Engineering, Science & Technologies (IJRESTs)	2016	ISSN: 2454-664X Vol. 1, No. 6	Peered Reviewed
317	Modulating Technique Based Cascaded Multilevel Inverter using Voltage Multiplier	Prof. Ruchi M. Pachagade	Electrical Engg.	International Journal of Innovative Research in Science, Engineering & Technology (IJIRSET)	2016	ISSN(Online): 2319-8753 ISSN(Print): 2347-6710 Vol. 5, Issue 2	Peered Reviewed




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318	Identifying Structured Attributes by Jointly Using Content and Querying Values	Prof. P.D.Thakare	Computer Engineering Department	International Journal for Engineering Applications and Technology (IJFEAT) ,	2016	ISSN 2321-8134	Peered Reviewed
319	Implementation of Message Authentication Scheme for Elliptic Curve Cryptography in Wireless Sensor Networks	Prof. Mangesh M.Ghonge	Computer Engineering Department	Imperial Journal of Interdisciplinary Research (IJIR) Vol-2, Issue-4,	2016	ISSN: 2454-1362	Peered Reviewed
320	A Review on Implementation of Message Authentication Scheme for Elliptic Curve Cryptography in Wireless Sensor Networks	Prof. Mangesh M.Ghonge	Computer Engineering Department	International Journal of Scientific Research in Science, Engineering and Technology (ijsrset.com)	2016	Online ISSN : 2394-4099	Peered Reviewed
321	Review Paper on Detection of Sentiment and Topic from the Text by using JST Model	Prof. R.V. Deshmukh	Computer Engineering Department	International Journal of Advent Research in Computer and Electronics (IJARCE) Vol. 3, No. 5	2016	E-ISSN: 2348-5523	Peered Reviewed




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322	Implementation of JST Model for Detection of Sentiment and Topic from the Text.	Prof. R.V. Deshmukh	Computer Engineering Department	International Journal of Research in Advent Technology, Vol.4, No.5, Available online at www.ijrat.org	2016	E-ISSN: 2321-9637	Peered Reviewed
323	Performance analysis Di-Ethyl Ether and Ter-Amy ethyl Ether blend with Diesel in CIDI-Engine: A Review	Prof.P.H. Rathod	Mechanical Engineering	International Journal of Research in Science & Engg. (IJRISE),Vol.	2016	ISSN: 2455-0124 (Online) 2350 – 0808 (Print)	Peered Reviewed
324	Performance Optimization of Mixed Flow Impeller by Ansys CFX	Prof.P.S. Raut	Mechanical Engineering	International Journal on emerging trends in technology April 2016 Volume 3 Issue 1 4049	2016	ISSN: 2455-0124 (Online) 2350 – 0808 (Print)	Peered Reviewed
325	Performance Optimization of Mixed Flow Impeller by Ansys CFX	Prof.P.S. Raut	Mechanical Engineering	International Journal on emerging trends in technology April 2016 Volume 3 Issue 1 4049	2016	ISSN: 2455-0124 (Online) 2350 – 0808 (Print)	Peered Reviewed
326	Residual Stress Estimation Of Cladding Process By Finite Element Analysis: A Review	Prof. T.V.Sabnis	Mechanical Engineering	International Journal Of Research in Science & Engg. (IJRISE),Vol.02,Issue:	2016	e-ISSN: 2394-8299	Peered Reviewed




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327	Falure Analysis Of Helical Coil Spring In Automobile System Using Finite Element Method	PROF. ANIRUDH M. SHENDE	Mechanical Engineering	INTERNATIONAL JOURNAL OF RESEARCH IN SCIENCE & ENGINEERING, VOL. 2 ISSUE 5, 2016 & PAGE NO. 01 TO 16	2016	E-ISSN: 2394-8299	Peered Reviewed
328	“Thermal Analysis of Cylindrical Perforated Fins In Staggered Arrangement By CFD”	Prof. Ashish B. Samarth	Mechanical Engineering	International Journal of Research In Science &Engineering (IJRISE), Vol 2, Issue 2, Page No. 44-55, March-2016,	2016	ISSN: 2394-8280.	Peered Reviewed
329	“A Review on LPG As a Refrigerant”	Prof. A. B. Samarth	Mechanical Engineering	” International Journal of Research In Science &Engineering (IJRISE), Vol 2,Special Issue 1-ICRITE, Page No. 115-121, March-2016,	2016	ISSN: 2394-8280.	Peered Reviewed




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ANDROID BASED STUDENT INFORMATION SYSTEM FOR EDUCATIONAL INSTITUTE

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ABSTRACT:

In today's digital World, the data management systems are becoming an essential need for the organizations and departments. Also, the lot of preference is given to the portability of system. The educational organizations have huge data of students which could make a heavy task to manage it all. So, we introduced an advanced management system which will help to manage this bulk data. The scope of this system is not only limited to data management system, but also we are expanding its capability to make this data available to students as per their convenience and at their fingertips. This system contains a web based panel for department to manage data and a mobile app for students. The system makes it possible to maintain students' data like daily attendance reports, test mark reports, the fee details, mobile number, email, etc. The panel can be used by one or more authenticated staff members through their separate personal logins. The system introduces various options for admin like uploading number of records directly using data files, which helps to reduce the time consumption, notifying students about the various events in department and also notifying students about low attendance or low performance in exams. The students can use an android application to see the notices, managing their attendance, performance and they can update their personal details. They can also ask their queries about academics directly from the app and get the resolution. Thus, this application definitely helps to reduce the paperwork and increase the transparency between students and the department.

Keywords: digital portable systems, management systems, mobile application for institute, student information system





DATA ACQUISITION AND STORAGE SYSTEM FOR CORPORATE DATABASE USING BIG DATA

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ABSTRACT:

Big data based data acquisition as well as database system plays an important role in the design of corporate data platform. Mostly big data frameworks have been integrated data compression and data serialization method. These methods cannot meet the importance of corporate production information management for requiring time-consuming and mass storage. Based on the existing big data frameworks, we propose an enhanced corporate big data platform in order to reduce the data processing time while requiring fewer data storage space. Specifically, focuses on evaluating the impact of multiple compression and serialization methods on the big data platform performance and tries to choose optimal compression and serialization method for the corporate data platform. Compared to the methods integrated in the past years, the experimental results showed the data compression time of the platform has been reduced by 73.9% with a less than 96% the size of data compressed, furthermore, the data serialization time has been reduced by 80.8%. With the increasing amount of data, it takes less time to compare with benchmark methods. Big amount of data handling is very crucial to maintain so it is necessary to perform active compression methodology on this.

Keywords: Corporate data, Big data, Data compression & Data serialization.

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SECURE THIRD PARTY AUDITING OF USERS IN CLOUD COMPUTING

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ABSTRACT:

Now a days the use of the cloud computing is on the peak where it is at public, personal level. The cloud service providers (CSP) provide the cloud server to the its end users. To regulate the working of cloud service providers in a fair way the concept of the data audit is emerged for its user. The company which does the data audit is called as third party auditor(TPA). The third party has some rights while it can misused the data while auditing by selling it to third party. TPA audits to check the data integrity. TPA can data audit of a user or a group of users. To maintain the data privacy of data of data owner we are going to use along with the user signature is document signature i.e the signature on each data content of user. In this we are going to solve this problem by performing various auto signature generation techniques over each and every file upload or share document by user with privacy preserving over cloud.

Keywords: CSP, TPA, data audit, signature, data integrity ,etc.

[1] INTRODUCTION

Cloud computing is a type of internet based computing that provides shared computer processing resources and data to computers and other devices on demand, and provide the storage space to the users to store their documents, images, songs etc, can also retrieve whenever they want.

Cloud Service Providers (CSP) provide the services to the users and also manage an





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IOT BASED IRRIGATION SYSTEM USING ARDUINO

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ABSTRACT:

IOT plays an Important role in many field ,one of that agriculture is one field. Internet of Things is a milestone in the evolution of agriculture technology. In India, Agriculture is most important occupation for indian families.agriculture is adopted by many indian farmers. agriculture play important role for development in food production .India is one of the Scarce water resources in the world. Water is main resource for Agriculture.Irrigation is one method to supply water but in some cases, there will be lot of water wastage.In this regard to save water and time we have proposed title of project Automatic irrigation system using IOT based on arduino .Moisture sensor is used to take sensor reading of soil moisture, decision makin is controlled by user by using microcontroller.

Keyword: soil moisture sensor,microcontroller,IOT and Arduino.

[1] INTRODUCTION

Agriculture is the major source of the largest population in India and is major contributor to Indian economy. However, technological involvement and its usability have to be grown still and cultivated for agro sector in India. Although few initiatives have also been taken by the Indian Government for providing online and mobile messaging services to farmers



e-Learning through LMS: New Era of Learning

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ABSTRACT:

E-learning is learning with ICT and digital media through guided participation in and across various socio-material and cultural practices in everyday life. People learn with ICT and digital media as an integrated aspect of using ICT and digital media in the everyday course of living – whether in school, at home or at work. E-learning is enacted in and enacts practices. Through these enactments, e-learning becomes both various ways to become more knowing about the world and to take part (participate) in the world. E-learning from this perspective must be viewed as associated with and not separated from practices of producing, spreading knowledge about, as well as using ICT and digital media concretely in everyday living. Following the implementation of Information and Communication Technologies in numerous segments of life, including the education system, the methods of teaching have significantly changed. Information and Communication Technologies have influenced the educational system which adapted to those trends and to the newer generations that spent their childhood playing with gadgets and learning at the same time. This is how the concept of e-learning and game-based learning emerged. Viewed in this way e-learning becomes an emergent, relational as well as empirically grounded concept that is formed through – and hence becomes an emerging effect of – everyday practices. In this paper, a very traditional learning method is discussed and some new methods with the integration of modern technology have been discussed. Also, in this paper, MOOC's that are designed as a collection of videos and other study materials are discussed.

Keywords: *e-learning system , ICT, digital media , MOOC, adaptive learning.*



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SECURE THIRD PARTY AUDITING OF USERS IN CLOUD COMPUTING

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ABSTRACT:

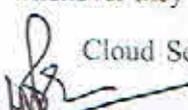
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ANDROID BASED STUDENT INFORMATION SYSTEM FOR EDUCATIONAL INSTITUTE

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ABSTRACT:

In today's digital World, the data management systems are becoming an essential need for the organizations and departments. Also, the lot of preference is given to the portability of system. The educational organizations have huge data of students which could make a heavy task to manage it all. So, we introduced an advanced management system which will help to manage this bulk data. The scope of this system is not only limited to data management system, but also we are expanding its capability to make this data available to students as per their convenience and at their fingertips. This system contains a web based panel for department to manage data and a mobile app for students. The system makes it possible to maintain students' data like daily attendance reports, test mark reports, the fee details, mobile number, email, etc. The panel can be used by one or more authenticated staff members through their separate personal logins. The system introduces various options for admin like uploading number of records directly using data files, which helps to reduce the time consumption, notifying students about the various events in department and also notifying students about low attendance or low performance in exams. The students can use an android application to see the notices, managing their attendance, performance and they can update their personal details. They can also ask their queries about academics directly from the app and get the resolution. Thus, this application definitely helps to reduce the paperwork and increase the transparency between students and the department.

Keywords: digital portable systems, management systems, mobile application for institute, student information system

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DATA ACQUISITION AND STORAGE SYSTEM FOR CORPORATE DATABASE USING BIG DATA

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ABSTRACT:

Big data based data acquisition as well as database system plays an important role in the design of corporate data platform. Mostly big data frameworks have been integrated data compression and data serialization method. These methods cannot meet the importance of corporate production information management for requiring time-consuming and mass storage. Based on the existing big data frameworks, we propose an enhanced corporate big data platform in order to reduce the data processing time while requiring fewer data storage space. Specifically, focuses on evaluating the impact of multiple compression and serialization methods on the big data platform performance and tries to choose optimal compression and serialization method for the corporate data platform. Compared to the methods integrated in the past years, the experimental results showed the data compression time of the platform has been reduced by 73.9% with a less than 96% the size of data compressed, furthermore, the data serialization time has been reduced by 80.8%. With the increasing amount of data, it takes less time to compare with benchmark methods. Big amount of data handling is very crucial to maintain so it is necessary to perform active compression methodology on this.

Keywords: Corporate data, Big data, Data compression & Data serialization.


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SURVEILLANCE USING FACIAL RECOGNITION

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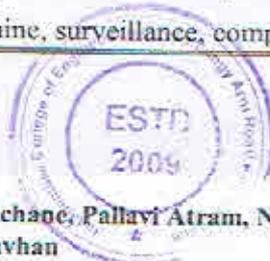
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ABSTRACT:

In the coming era of digitization the human living nature is going to be much more depends on the digital appliances. And then there comes the part that plays a key role in the when using these digital machines is the security. In our common day life we are using some of the most used and not likely to be secure ways for the security purpose some of them are passwords, biometric scan, one time password (OTP) and retinal scan. But as the computing power grows and techniques are going to be proposed these methods are not going to be the as secure methods to keep us and the data and our self. For that purpose we need to develop some new way to keep surveillance and security i.e. the facial recognition technology which is the consider to be most secure and probably reliable of all of above. In this paper we have develop and given the whole plan of the facial recognition technology. The use of this technique can make the surveillance much secure than it was it has many application areas we can apply this technology in most of the available security techniques.

Keywords: digitization, data, secure, machine, surveillance, computing, application



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ARTIFICIAL INTELLIGENCE BASED EDGE COMPUTING PLATFORM FOR INDUSTRIAL APPLICATIONS

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ABSTRACT:

Cloud computing has limitations such as computational complexity and delay. Edge computing is efficient and has fair resource allocation such as power and battery lifetime in internet of things based industrial applications. Co-ordination of AI at the edge will remarkably improve the range and computational speed of IoT based devices in industries. To solve the problem of short battery lifetime, and delay, intolerant portable devices we propose in this paper a forward central dynamic and available approach (FCDA) by adapting running time of sensing and transmission processes in IoT based portable devices. A system level battery model by evaluating energy dissipation. A data reliability model for edge artificial intelligence based IoT devices.

Keywords: Industrial IoT, Edge Computing, AI, FCDA, Battery Model.

[1] INTRODUCTION



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USED BOOK PLATFORM

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Abstract- An online bookstore software projects that acts as a central database containing various books in stock along with their title, author and cost. This project is a website that acts as a central bookstore. This web project is developed using angular js, html as the front end and python, mysql as a back-end. The mysql database stores various book related details. A user visiting the website can see a wide range of books arranged in respective categories. The user may select desired book and view its price. The user may even search for specific books on the website. Once the user selects a book, he then has to fill in a form and the book is booked for the user. If user wants to sell a book he can add his details along with the details of books to be purchased. And our main intantation behind this project is to provide the books free to the students who are in need i.e poor.

Index Terms-



S.A Murab, Ashiwini Bhele, Monika Jaiswal, Shamal Thakre, The Nachiket Pisal

I. INTRODUCTION

E-commerce (electronic commerce or EC) is the buying and selling of goods and services, or the transmitting of funds or data, over an electronic network, primarily the internet. These business transactions occur either as business-to-business, business-to-consumer, consumer-to-consumer or consumer-to-business.

E-commerce shops have become part of our daily lives. Technological advancement has made it possible for people to sit in the convenience of their homes and still shop online without going to a physical shop.

An online bookstore software projects that acts as a central database containing various books in stock along with their title, author and cost. This project is a website and can be android app that acts as a central bookstore. This web project is developed using angular js, html as the front end and python, mysql as a back-end. The mysql database stores various book related details. A user visiting the website can see a wide range of old or new books arranged in respective categories. The user may select desired book



DEVELOPMENT OF ARCHITECTURE IN IMAGE PROCESSING USING STEGANOGRAPHY AND CRYPTOGRAPHY

Pawar Sukhvinderkaur Sevasingh

Anirudha Kolpyakwar(guide)

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Abstract-Steganography is the art and science of communicating in a way which hides the existence of the communication. In contrast to cryptography, where the enemy is allowed to detect, intercept and modify messages without being able to violate certain security premises guaranteed by a cryptosystem, the goal of steganography is to hide messages inside other harmless messages in a way that does not allow any enemy to even detect that there is a second secret message present." technique of hiding secret data within an ordinary, non-secret, file or message in order to avoid detection; the secret data is then extracted at its destination. The use of steganography can be combined with encryption as an extra step for hiding or protecting data. The word steganography itself originated in Greece and means "covered writing". during important historic events of our past, steganography was often used to trade personal secrets, plan covert operations and send political espionage information cryptography is associated with the process of converting ordinary text into unintelligible text and vice-versa. It is a method of storing and transmitting data in a particular form so that only those for whom it is intended can read and process it. cryptography not only protects data

from theft or alteration, but can also be used for user authentication. Thus preventing unauthorized access to information. The prefix "crypt" means "hidden" and suffix graphy means "writing". In Cryptography the techniques which are used to protect information are obtained from mathematical concepts and a set of rule based calculations known as algorithms to convert messages in ways that make it hard to decode it. These algorithms are used for cryptographic key generation, digital signing, verification to protect data privacy, web browsing on internet and to protect confidential transactions such as credit card and debit card transactions.

Keywords: Steganography, Cryptography, suffix, prefix, cryptograph, digital signing.

1. INTRODUCTION

In computer science, digital image processing is the use of a digital computer to process digital images through algorithms. As a subcategory or field of digital signal processing, digital image processing has many advantages over analog image

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MINIMIZING INFORMATION LEAKAGE IN MULTICLOUD STORAGE SERVICE

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ABSTRACT:

Multiple clouds are used to store important data by using many advanced technology. Separated data over different cloud storage providers (CSPs) automatically provides a certain degree of data leakage control, so that no single point of attack can leak all the data. However, unplanned distribution of data chunks can lead to high data disclosure even while using multiple clouds. An important data leakage problem caused by unplanned data distribution in multicloud storage services. Then, we present StoreSim, an data leakage aware storage system in multicloud. StoreSim aims to store similar data on the same cloud, thus minimizing the user's data leakage across multiple clouds. We design an approximate algorithm to efficiently generate similarity preserving signatures for data chunks based on MinHash and Bloom filter, and also design a function to compute the data leakage based on these signatures. Next, an effective storage plan generation algorithm based on clustering for distributing data chunks with minimum data leakage across the multiple clouds. Finally, evaluate our scheme using two real datasets from Wikipedia and GitHub. We show that our scheme can reduce the data leakage by up to 60% compared to unplanned placement. Furthermore, our analysis on system attackability demonstrates that our scheme makes attacks on data more complex. Data security plays an important role in cloud in which lot of data is get shuffled and became unsecured while sharing to TPA or other users.

Keywords: Multicloud Storage, Data leakage, system attackability





AGRICULTURE PRODUCT SELLING SYSTEM FOR FARMERS

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Abstract:

Farming is the Prime Occupation in spite of this, today the people involved in farming belongs to the lower class and is in deep poverty. The Advanced techniques and the Automated machines which are leading the world to new heights, has been lagging when it is concerned to Farming, either the lack of awareness of the advanced facilities or the unavailability leads to poverty in Farming. Even after all the hard work and the production done by the farmers, in today's market the farmers are cheated by the Agents, leading to poverty. Agriculture Product selling will serve as a way for the farmers to sell their products across the country just with some basic knowledge about how to use the website. The site will guide the farmers in all the aspects, the current market rate of different products, the total sale and the profit for the sold products, access to the new farming techniques through e-learning and centralize approach to view different government's agriculture schemes including the compensation schemes for farming.

Keyword: Website, Android, MySQL, SMS facility.

I. INTRODUCTION

Agriculture product selling system the farmer is web Application which will help the farmers to perform the Agro marketing leading to achieve success and increased In their standard of living; It can be good marketing facility for them. At initial stage farmer will register. After completing of registration, Farmer will have a unique ID for logging.

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MINIMIZING INFORMATION LEAKAGE IN MULTICLOUD STORAGE SERVICE

Devika S.Gandhi¹, Prof.S.A.Murab², Prof.P.D.Thakare³

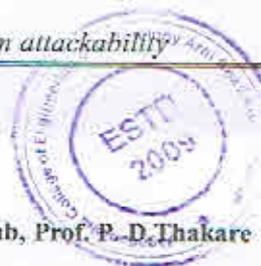
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ABSTRACT:

Multiple clouds are used to store important data by using many advanced technology. Separated data over different cloud storage providers (CSPs) automatically provides a certain degree of data leakage control, so that no single point of attack can leak all the data. However, unplanned distribution of data chunks can lead to high data disclosure even while using multiple clouds. An important data leakage problem caused by unplanned data distribution in multicloud storage services. Then, we present StoreSim, an data leakage aware storage system in multicloud. StoreSim aims to store similar data on the same cloud, thus minimizing the user's data leakage across multiple clouds. We design an approximate algorithm to efficiently generate similarity preserving signatures for data chunks based on MinHash and Bloom filter, and also design a function to compute the data leakage based on these signatures. Next, an effective storage plan generation algorithm based on clustering for distributing data chunks with minimum data leakage across the multiple clouds. Finally, evaluate our scheme using two real datasets from Wikipedia and GitHub. We show that our scheme can reduce the data leakage by up to 60% compared to unplanned placement. Furthermore, our analysis on system attackability demonstrates that our scheme makes attacks on data more complex. Data security plays an important role in cloud in which lot of data is get shuffled and became unsecured while sharing to TPA or other users.

Keywords: Multicloud Storage, Data leakage, system attackability





Design and Analysis of Chassis with Loading Condition and with Weight Optimization Solution

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Abstract: The chassis frame is an important part in a Vehicle and it carries the whole load acting on the truck as well as different parts of the automobile. So it must be strong enough to resist the shock, twist, vibration and other stresses. Maximum stress and maximum deflection are important criteria for design of the chassis. There are several types of chassis frames available and they are much strength full. But the direct major or minor impacts on chassis frames in accidental cases may cause the dynamic unbalancing, chassis misalignment and other problems which affect the vehicle performance as well as the appearance. Due to large and sudden jerks during running conditions may create the vibrations inside the chassis which cause the prior failure in chassis members. The objective of this paper is to improve the design of chassis by using different cross sections and material. Also the weight of chassis is suggested to enhance the vehicle performance. For this purpose entire design work is carried out in CATIA V5R19 software. Both cross sections (C section and I sections are considered) with different materials are analysed for stresses and deformation in ANSYS 14.5 software. Based on the comparative study of obtained results the best chassis cross section and design will be suggested.

Keywords: Heavy duty chassis, FEA of Chassis, Structural behavior of Chassis, Design of Chassis, Chassis Analysis, Deformation analysis of Chassis, Design improvement in chassis, Weight Optimization, ANSYS 14.5

I. INTRODUCTION TO HEAVY DUTY CHASSIS

There are many industrial sectors using this Vehicle for their transportations such as the logistics, agricultures, factories and other industries. If any of the excitation frequencies coincides with the natural frequencies of the Vehicle chassis, then resonance phenomenon occurs. The chassis will undergo dangerously large oscillations, which may lead to excessive deflection and failure. The vibration of the chassis will also cause high stress concentrations at certain locations, fatigue of the structure, loosening of mechanical joints, creation of noise and vehicle discomfort. To solve these problems, study on the truck chassis dynamic characteristics is thus essential. The torsion stiffness and modal parameters were determined experimentally and then used to validate the finite element model and finally the chassis was optimized to increase the structural stiffness. It was noted that the torsion mode dominated the natural frequency. A chassis consists of an internal framework that supports a man-made object in its construction and use. It is analogous to an animal's skeleton. An example of a chassis is the under part of a motor vehicle, consisting of the frame (on which the body is mounted). If the running gear such as wheels and transmission, and sometimes even the driver's seat, are included then the assembly is described as a rolling chassis.

II. OBJECTIVES OF STUDY

- Virtual Design of C-section and I-section Chassis.
- Determination of Stress and deformation in chassis frame.
- Study of Finite Element Method and its applications.
- Study of CAD and FEA Package.
- Comparative study of chassis with different materials and cross sections.

III. OUTCOMES FROM LITERATURE SURVEY

- Vibrations due to sudden jerks are to be studied well. Focus needed on vibrations.
- FEA Analysis is best suitable method for chassis experimentation and testing.
- Stresses are induced in the rear members of chassis.
- Different chassis materials are studied rarely.
- Combination of structural, vibration and shape optimization analysis will provide deep study of chassis deformation and stresses.

Real Time Vehicle Number Plate Recognition by using Raspberry Pi3

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Abstract: The number plate Recognition system for vehicles plays very important role for authentication of specific vehicle. The system also has lot of commercial uses. As number plate having different formats and variety of fonts present over the vehicle. In this dissertation, a simple, smart, efficient and cost effective system can be implemented using OpenALPR Cloud, the system would be connected with this cloud. Thus the system works on real time inputs. The system make use of raspberry pi3, pi camera and PIR sensor as a hardware tools. Here we have use a Node-RED which is a flow-based development tool for visual programming developed originally by IBM for wiring together hardware devices, APIs and online services as part of the internet of things. The system uses a Passive infrared sensor which detects the number plate of vehicle then pi camera captures image and send it to an OpenALPR Cloud which further authenticates the vehicle.

Keywords: Authentication, Raspberry pi3, OpenALPR, Node-RED.

1. Introduction

The automatic Number plate recognition was invented in 1976 at the police scientific development branch in the United Kingdoms. The system is capable of determining if the vehicle is registered or not, and then informing the authority regarding the status of vehicle. As Number plate is a unique identification of a specific vehicle. Number plate recognition has been applied in enormous applications.

Thus the system with Automatic Number plate recognition is a combination of integrated hardware and software that will not need of humans to do it. The purpose of this paper is to develop and implement a smart system for optimum use of information and communication technology. The main goal of system is to recognize the number plate of vehicle and to allow the specific vehicle only in an organization.

2. Literature survey

This paper focuses on security of parking at any premises. The implementation of Vehicle number plate recognition was achieved using Raspberry pi [1]. The main objective of this project is to design and develop an Automatic registration number of the vehicles automatically without any human

intervention [2]. This paper is helpful for the identification and detection of vehicle number plate using raspberry pi2 [3].

3. Proposed System

The proposed system will be comprising of Raspberry Pi3 processor. It will be a kind of heart of the project. This onboard computer is able to effectively as well as efficiently communicate with the output and input modules being used. The Raspberry pi is a credit-card sized single board computer which was developed in UK by the Raspberry pi foundation. Here, the operating system for the detection of vehicle number plate using Raspberry pi3 is the Raspbian JC. For the recognition purpose, Raspberry pi modelB+ is used. Raspberry pi is a SOC (system on chip) device has inbuilt 1.2 GHz BCM 2837 Arm Cortex processor. The arm cortex processor is of 64 bits. Raspberry pi has 1GB Ram. The average power is ranging from 1.5 to 6.7 watt. Raspberry pi has 40 digital input output pins out of which 27 pins are GPIO (General Purpose Input Output). The operating system is installed in external SD card for booting and storage purposes.

As in many industries, they do not allow the unknown vehicles for the security issues. Their security is very important for industries thus a system is required to help for recognize of unknown vehicle on gate. Recognizing vehicle number plates is a difficult but much required system for today's world. This is very useful in the places like automating toll booths, automated signal breakers identification and identifying traffic rule breakers. Thus we propose a Raspberry Pi based vehicle number plate recognition system which automatically recognizes number plates of vehicles.

The system uses a camera circuit interfaced to a Raspberry pi. The system processes incoming camera footage to find or detect any trace of number plates. On placing a number plate in front of the camera, it further processes the camera input, extracts the number plate part from the provided image. Processes the extracted image using ALPR and extracts the number plate number from given input. Hence we put forward a vehicle number plate recognition system using Raspberry Pi3.

The camera plays important role in capturing images of


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Design & Analysis of Synchronous Reference Frame Based Shunt Active Power Filter Using Matlab Simulink

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Abstract – This paper presents the implementations of a new control algorithm for a three-phase shunt active power filter to regulate load terminal voltage, eliminate harmonics, and improve the power factor in systems with an uncontrolled rectifier and an AC controller as the non-linear loads. Different methods are used to control the active power filters. The reference current to be detected from the load current and processed by the active power filter controller is obtained from control algorithms, of Synchronous Reference Frame Theory (SRF Theory). The voltage source inverter (VSI) is the core of an active power filter. The system is modeled and simulated using MATLAB/Simulink simulation package with a shunt active power filter to compensate for the harmonics current injected by the loads.

Keywords- Shunt Active Power Filter, Voltage Source Inverter, Current controller, Non linear load, Synchronous Reference Frame, Total Harmonic Distortion.

INTRODUCTION

The increasing number of power electronics based equipment has gravely impacted the quality of electric power supply. Harmonics are caused by both industrial and domestic loads. At the same time, much of the equipment causing the disturbance is quite sensitive to the harmonics themselves. A shunt active power filter (SAPF) is a device that is connected in parallel to a

group of loads. The shunt active power filter cancels the reactive and harmonic currents drawn by the load so as to make the supply current sinusoidal. Thus, the resulting total current drawn from the ac main becomes sinusoidal. Shunt active power filters is the device which generates the same amount of harmonic as generated by the load but 180° phase shifted. The advantage of active filtering is that it automatically adapts to changes in the network and load fluctuations. They can compensate for several harmonic orders, and are not affected by major changes in network characteristics, eliminating the risk of resonance between the filter and network impedances. Another advantage is that they take up very little space compared to traditional passive compensators. One of the key issues for a proper implementation of an active filter is to use a good control algorithm. Control strategies are applied to active power filters for determining the reference compensation currents to maintain sinusoidal source currents supplied to nonlinear loads according to IEEE-519 standards. The design of an active power filter becomes a challenging task for meeting the strict requirements of critical loads. The use of computers in the 978-1-4799-3421-8/14/\$31.00 ©2014 IEEE design stage helps in the better understanding of the circuit behavior, selection of component ratings; design of closed loop controllers, and also to arrive at optimum solutions. Simulation is a powerful way to reduce development time and ensure the proper fulfillment of critical steps. This paper proposes a model of a three-phase three-wire shunt active power filter based on synchronous reference frame control strategy for the extraction of reference

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Efficient Kinetic Energy Recovery System for Vehicle

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Abstract – KERS is generally used to accelerate the running power of the four wheel drive in respective to the engine speed. This system is generally works on energy absorption principal when then vehicle taking a turn as we know there was a frictional contact was occurred in between the four wheel drive and road surface hence the there will be large lost of kinetic energy which is then dissipated as a heat to the atmosphere to utilize this lost of kinetic energy this system is used which covert this lost of kinetic energy into vehicle acceleration.

Keywords: Energy, Acceleration, Reservoir, Efficiency

power then same energy is used to accelerate the vehicle at an instantaneous point hence works on principle on acceleration with retarding speed. It serves and provide a path to utilize waste heat means it also work for utilizing the illegally dissipating energy this device recover kinetic energy presented in the waste heat created by the vehicle generally during braking process. UP to 88 BHM for 8.8 sec or 500 KJ of waste in power was stored. KERS builders, Flybrid systems demonstrated a working F1 device at the auto sport international show. But many F1 teams opposed it at it was quiet expensive so it was banned in 2010 season. At 2011 North American international auto show, Porsche 918 concept car which uses a flywheel based KERS. A motorcycle racing company KTM secretly tested this system in their vehicle but They were banned as that system was illegal and unstable for motorcycles.

I. INTRODUCTION

KERS is the inbuilt system that helps to utilize waste heat and kinetic energy during deceleration is first converted into

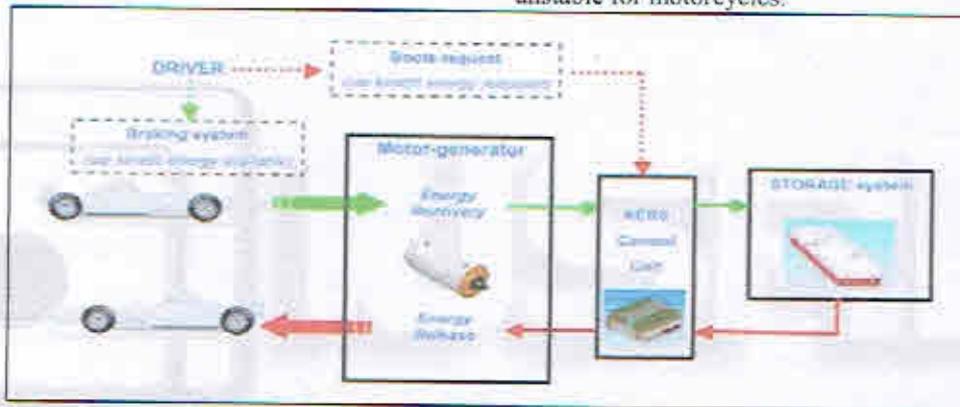


Fig. 1: Kinetic Energy Recovery System Block Diagram

II. WORKING PRINCIPLE

KERS is works on the principle that it stores the kinetic energy during deceleration of the vehicle and same lost of kinetic energy is then converted into power to accelerate the vehicle. Generally when the vehicle taking a turn a driver applies a break and kinetic energy is lost due to friction between the road surface and a wheel this lost of energy is used to boots vehicle speed. The standard KERS system

works on the basis of two basic cycle charge cycle and boots cycle during charge cycle when the speed of the vehicle is reduces as it takes a turns an actuator unit absorb the waste heat from the rear brakes this stored energy is then passed through the central possessing unit and into storage unit. This units are positioned centrally to maintained the position, balancing and ground clearance of the vehicle.

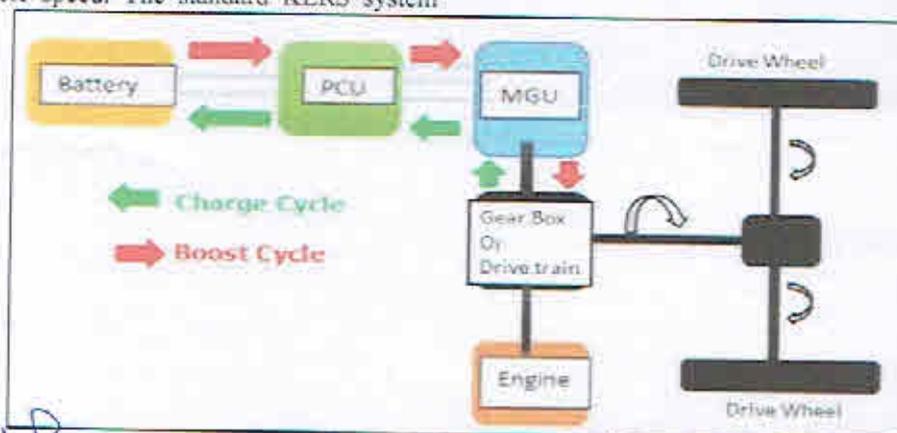


Fig. 2: working Principle

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Inventory Management System

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Abstract: Inventory management and supply chain management are the backbone of any business operations. With the development of technology and availability of process driven software applications, inventory management has undergone revolutionary changes. In any business or organization, all functions are interlinked and connected to each other and are often overlapping. Some key aspects like supply chain management, logistics and inventory form the backbone of the business delivery function. Therefore, these functions are extremely important to marketing managers as well as finance controllers.

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History: MCIE Group commenced its commercial production at Nasik, Maharashtra, India in the year 1984 as Sheet Metal Automotive Component manufacturing unit. Over the years the Group has broadened its product range to sheet metal stampings and its assemblies like Load Body (Cargo), Door Assemblies, Floor Assemblies, Machined Components like Salisbury Tube Assemblies, Banjo Beam Assembly and also Bus Body building, Tipper manufacturing and Roll forming. Innovation has been on-going efforts at MCIE Group & as a result they have developed the competency to be a Product Development Group providing the "Art to Part" Solutions to their Customers. Effective Mapping of Customer requirement and adhering to the Voice of Customer thereby paving a way to Total Customer Satisfaction and Delight is the major focus of the entire organization. This undoubtedly makes them a proud supplier with a strong foothold on the market dynamics and thereby earning the goodwill of our customers to the hilt.


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SMART FLOWER AND AGRICULTURAL SYSTEM

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Mr. Akash S. Rathod²

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Ku. Swati P. Unhale⁴

Ku. Swarangini S. Sapat⁵

Abstract

In the sunny days, when the ultra violet rays scattered on the solar panels, the energy is collected and stored in a battery. In this paper, we are going to introduce a solar photo voltaic cells for collecting rays from the sunlight and using this solar array transforming this mechanical energy to electric energy. In this system, the supply for the irrigation is given by electricity stored in the battery collected through sun rays in the rural areas where there is scarcity of electricity. In this solar kit, the Automatic solar tracker have been introduced which stimulates and increases the efficiency of the solar panels which moves according to the direction of the sun rays. By photovoltaic effect, a solar photovoltaic(PV) cell is an electric device which convert the light energy into the electric energy directly. A photoelectric cell is defined as a device whose electrical characteristics like current, voltage, resistance, vary when exposed to light. Solar cells are the basement for any photovoltaic modules panels. As a photo detector, the solar cells are used for detecting the light near the visible range or measuring the light intensity. Also interfacing the different sensors in farm and manipulating and control their data on monitor using IOT. This will make the agriculture very easy in the way and reduce the manpower.

Keywords:

Moisture sensor;
Ultrasonic sensor;
Humidity sensor;
Battery;
Solar panels;
LDR;
Pump.

Author correspondence:

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1. Introduction

A several decade before, agriculture had been playing an important role in human kind to surpass the growing and dynamic demands every day. Irrigation is a crucial component of crop production in several areas of the world. PA (precision agriculture) is an integrated system that was designed to increase long-term, field specific, and also farm production efficiencies, productivity, and profitability especially in the area of agriculture. The parameter that has to be properly monitored to enhance the yield is moisture. Moisture sensors will monitor and collect information about the field moisture. So according to the need pump can be start to water the field. This can be done from anywhere with the help of IOT. Internet of Things (IOT) is being used in several real time applications. Also we are aware of PA is very essential for the countries like India those agriculture completely depends upon the rains and climatic conditions only. Precision farming makes things to be quicker response times, better quality control for the yield with less labor effort. So these are several factors that leads for requirement of use in sensing technologies in the field of PA to monitor the crop parameters and control the utilization of resources towards the humankind benefits The project is designed to develop a Farmer Helper system which switches the pump motor ON/OFF By Mobile Phone also sensing the moisture content of the soil. In the field of agriculture, use of proper method of irrigation is important.



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3.2.2 Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years

1. Title of Book:- Real Time Shop-Type Recommendation System

Author:- Prof.A.A.Chincholkar

Name of the publisher:- LAP LAMBERT Academic Publishing, Mauritius

Year of Publishing:-2019

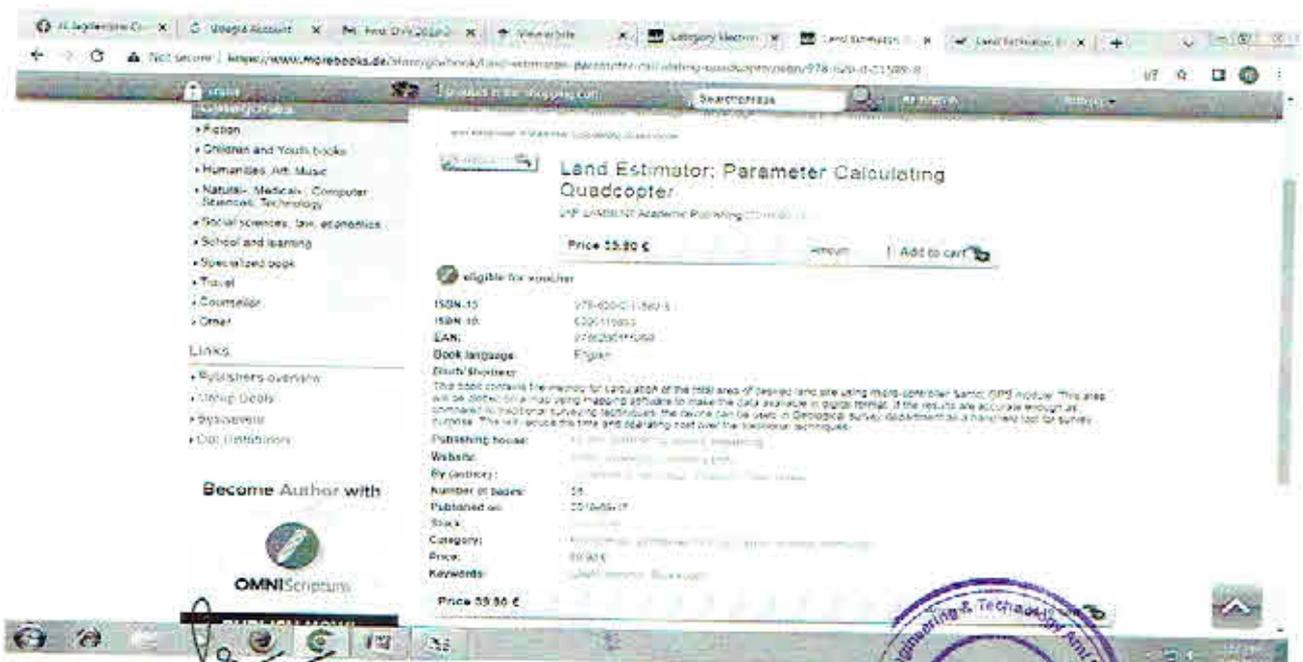


2. Title of Book:- Land Estimator : Parameter Calculating Quadcopter

Author:- Prof.A.A.Chincholkar

Name of the publisher:- LAP LAMBERT Academic Publishing, Mauritius

Year of Publishing:-2019



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Database Management System with NoSQL



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A database is a collection of data that is saved and organized to allow easy retrieval when needed. It is the collection of schema, tables, queries, reports, views, and other objects. Databases are not limited to only computers. Where databases are more complex they are often developed using formal design and modeling techniques. The database management system (DBMS) is the software that interacts with end users, applications, the database itself to capture and analyze the data and provides facilities to administer the database. The sum total of the database, the DBMS and the associated applications can be referred to as [read more](#)

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Anirudha Kolchakwar
Pooja Chaudhari
Socha Munob

Fundamentals of Data Structures and Algorithms

Data Structure and Algorithms



Data structure is a representation of the logical relationship existing between individual elements of data. Data Structure is a way of organizing information in such a way that we can also define data structure as a mathematical or logical model of a structure in the main memory of a computer. The storage structure mechanism in secondary memory is called as storage structure. It is defined as the way of storing and manipulating data in organized form so that it can be used efficiently.



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Data structure is a representation of the logical relationship existing between individual elements of data. Data Structure is a way of organizing all data items that considers not only the elements stored but also their relationship to each other. We can also define data structure as a mathematical or logical model of a particular organization of data items. The representation of particular data structure in the main memory of a computer is called as storage structure. The storage structure representation in auxiliary memory is called as file structure. It is defined as the way of storing and manipulating data in organized form so that it can be used efficiently.

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Floating Solar Power Plants: A Review

Nitin Ingole¹, Aniket Kelzarkar², Pratik Rathod³, Ashish Bandewar⁴

^{1,2}Student, Mechanical Engineering, Jagadamba College of Engineering and Technology, Yavatmal (M.S.) India

^{3,4}Assistant Professor, Mechanical Engineering, Jagadamba College of Engineering and Technology, Yavatmal (M.S.) India

Abstract - Energy demand in this era has increased which led us to go for renewable energy sources; solar energy with this respect can fulfill the energy demand. This paper aims at review of the existing floating solar plants worldwide with respect to their capacity. Floating solar plants can save the area for generation. Limitations to such power plant are land availability, land development & land acquisition, substation capacities, evacuation also timely clearances for the project on land and evacuation. These are hurdles for completion of the project. Most of the locations projected by the government considering solar radiation data in the country are hot and dry regions. Though at these locations the radiation appeared to be higher, the energy yield of these points is less due to heating of the solar panels and higher temperature of the surface of solar cells. To overcome these problems an innovative idea has come in front for installation of solar power plants on the water that is canal tops, water bodies, lakes, dam backwater and reservoirs, which generally belongs to the government. This paper reveals review regarding the floating solar PV power plants installed in the world.

Key Words: Renewable energy, solar photo voltaic, solar power plants, floating Solar System, floating solar PV installations in the world, advantages of floating solar power plants, types of floating structures for solar power plants

1. INTRODUCTION

The biggest problem in our country is power crisis. Around 70% coal is used for generation of electric energy. Irrigation and industry production is get affected due to load shedding, daily shutdown, etc. So we need to move towards renewable energy sources to generate electricity.

Now a days renewable energy sources are growing fast not in just India but many other countries. Solar energy is clean, efficient and abundant source of alternative energy. The use of solar energy Solar energy decreases greenhouse effect. Area wise seventh largest country is India and has good sunshine. Solar energy is energy produced by sun created through a thermonuclear process and this process crates heat and electromagnetic radiations. These electromagnetic radiations have the energy that reaches the earth. Solar energy is the indirect source of energy so we need two main components: firstly the collector to collect radiations which are coming from the sun and convert it into the electrical energy form, secondly storage unit as radiations are varying in nature. To solve the energy crisis solar energy will be an excellent solution but to use land mounted solar system is the requirement of land which is very costly and less available to get it. India will generate up to 1.75 GW solar powers from renewable energy sources and 1 GW of solar power in upcoming 10 years. As per the Jawaharlal Nehru National Solar Mission around 5000 MW has been commissioned till date in different parts of the country. To make the country consuming green power in world, the progress is not just sufficient and needs hard efforts by every state and state departments.

Floating solar system has PV concentrator which is very light weight and it floats on water bodies, mounted on anchored rafts float on the surface of irrigation canals, water reservoirs, quarry lakes, and tailing ponds. Some of systems exist in France, India, Japan, Korea, the United Kingdom and the United States.

The floating solar system reduces the need of costly land area, it also saves the drinking water that would otherwise be lost due to evaporation, reduces the growth of algae. The solar system shows a higher efficiency as the panels are kept in cooler temperature than they would be on land area. The floating platforms are 100% recyclable, utilizing high density polyethylene which can withstand ultraviolet rays and corrosion. Floating solar is also called as 'SOLAR ARRAY' or 'FLOTOVOLTAIC' or 'FLOATING PV'.


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Floating Solar Power Plants: A Review

Nitin Ingole¹, Aniket Kelzarkar², Pratik Rathod³, Ashish Bandewar⁴

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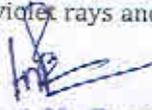
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WASTE MINIMISATION FOR HIGHWAY CONSTRUCTION

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³Civil Engineering Student

Abstract — In present era, safe disposal of Industrial wastes is a great problem. These waste materials create environmental pollution because many of them are non-biodegradable. India has large network of industrial which are in different parts of the country and many more are to come in the near future. Million metric tons of industrial wastes are produced in this industry. The pollution and disposal problems are minimized by utilizing these materials in highway construction. It is essential to test these materials and to find a new methodology and specification to increase the use of these industrial wastes in road construction in India. A review of various Industrial wastes to be used in the construction of highway has been discussed in this paper. The common waste materials are used are construction and demolition waste and tiles waste causing problems in the disposal.

Keywords: C & D (Construction and Demolition) waste, Tiles waste, Ceramic waste, Industrial waste.

INTRODUCTION

We know that the India is developing country which means that industrialization is growing day by day. Disposal issue of the waste products is a challenge now a day. Some of these waste materials are not biodegradable and often leads to waste disposal crisis and environmental pollution. Due to increasing in waste volume and a shortage of landfill, waste management is becoming a more significant and important subject. The use of these materials in road making is based on technical, economic, and ecological criteria. India has vast network of industries located in different parts of country. Traditional soil, stone aggregate sand, bitumen, cement etc. are used for road construction. Natural materials being exhaustible in nature, its quantity is declining gradually. Also, cost of extracting good quality of natural material is increasing. If this material can be suitably utilized in highway construction, the disposal problem of the waste may be reduced it will also help to reduce pollution. Keeping in mind the need for bulk use of these solid wastes in India, it was thought expedient to test these materials and to developed specifications to enhance the use of these industrial

wastes in road making, in which higher economic returns may be possible.

MATERIAL EMPLOYED

Since construction and demolition waste are producing on large scale and ceramic (Tiles) wastes are also generating on large scale. Management of these waste is big problem that world is facing now. Here is the best way to manage these utilizing it in road construction. Hence, we are using these two materials.

Sampling: -

Sampling is the process of collection of materials from their resources. Sampling of C and D waste and Tiles waste can be done as follows.

C and D - due to urbanization of construction domain is increasing drastically along with that environmental issue like landfill due to illegal dumping etc are also increasing and every man-made structure has a certain year of life span. Due to demolition construction waste is produce and due to less land availability disposing is a problem. So, C and D waste is collected from the site where the demolition process is going.

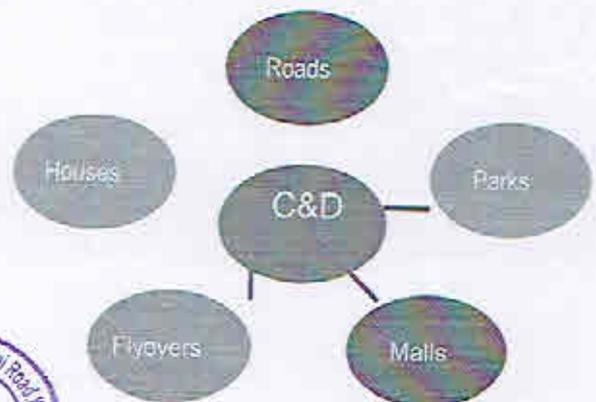


Figure 1: Various sources of Construction and Demolition waste

"Soil Stabilization by using Waste Material - Brick Dust"

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Abstract - As we know that India is a farmer's country. It indirectly says that the quality of soil present in most of regions is very good for farming. But with the rapid growth of population fast urbanization and big construction of building and other important structure has taken as to use good quality available land. Due to fast urbanization and other all things, there is no choice for people to use soft and weak soils around for construction activities such soil offers poor shear strength and high swelling and shrinkage. To make this type of soil workable it has to be improved by employing stabilization techniques. The construction on black cotton soil is the major issue in India. There are many material can be used to stabilize the black cotton soil, like cement, lime, rise husk ash, fly ash etc. But in this report we are using the brick dust as a stabilizing material. The results of various test were observed whether it improves the black cotton soil or not. By using various laboratory test.

KEYWORDS: Black cotton soil, Brick dust powder, stabilization.

1. INTRODUCTION

1.1 General

Black cotton soils are very fertile soils, they are not good as road or construction foundation. Black cotton soils are expansive clays with high potential for shrinking or swelling as a result of changing moisture content. Due to intensive shrinks well processes, surface crack resulting in openings during dry seasons.

These openings are usually more than 50mm wide and several millimeters deep. Cracks disappear during wet season but an uneven soil surface stays as a result of irregular swelling and heaving. The black cotton soils have low strength and are susceptible to excessive volume changes, making their use for construction purposes very difficult. Instability of these soils cause more damage to structures, than any other natural hazard, including earthquakes and floods, unless proper black cotton soil stabilization performed.

Expansive nature of this soil negatively affects its bearing capacity. When dry, black cotton soil is so hard that the clods cannot be easily pulverized for treatment for its use in road construction. This leads to serious problems related to consequent performance of the road. If black cotton soil stabilization is not applied, the damage will be apparent usually several years after construction. replacement of expansive soil with a no expansive material is a common method of reducing shrinks well risk. In the case when expansive soil or stratum is thin, then the entire layer can be removed. However, often the soil or stratum extends too deep and in that case this method is not economically efficient.

This problem can be by overcome by using Brick Dust in infrastructure projects such as highways, railways, water reservoirs. Since Brick Dust is freely available for the project in the vicinity of brick manufacturing plants, it can be used for stabilization of soft fine grained soil.

1.2 Soil Stabilization

"Soil stabilization is a technique aimed at increasing or maintaining the stability of soil mass and chemical alteration of soil to enhance their engineering properties."

Stabilization allows for the establishment of design criteria as well as the determination of the proper chemical additive and admixture rate to be used in order to achieve the desired engineering properties. Benefits of the stabilization process can include higher resistance values, reduction in plasticity, lower permeability, reduction of pavement thickness, elimination of excavation material hauling or handling. Stabilization of expansive soils with admixtures controls the potential of soils for a change in volume, and improves the strength of soils.

Soil stabilization is done by various methods by adding fly ash, rise husk ash, chemicals, fibers, adding lime, by different geo materials like geo synthetic, geo grid and geo form. Soil stabilization allows engineers to distribute a larger load with less material over a longer life cycle.



A Review Article on Study Analysis of T-Beam Bridges by Finite Element Method and Courbon's Method

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Abstract — T-beam bridge decks is one of the principal types of cast-in place concrete decks. It consist of a concrete slab integral with girders. A T-beam bridge was analyzed by using I.R.C. loadings as a one dimensional structure and also T-beam bridge is analysed as a three-dimensional structure by using finite element plate for the deck slab and beam elements for the main beam using software .Both models are subjected to I.R.C. Loadings to produce maximum bending moment. We are study from this result the finite element model are lesser than the results obtained from one dimensional analysis by Courbon's Method, that means the results obtained from manual calculations subjected to IRC loadings are conservative.

Key Words — T-Beam, Finite Element Method, Courbon's Method

1. INTRODUCTION

A T-beam used in construction, is a load-bearing structure of reinforced concrete, wood or metal, with a t-shaped cross section. The flange (Horizontal Section) or compression member of the beam in resisting compressive stresses. The web (vertical section) of the beam below the compression flange serves to resist shear stress and to provide greater separation for the coupled forces of bending

In some respects, the T-beam dates back to the first time a human formed a bridge with a pier and a deck. After all, a T-beam is, in one sense, no more than a pillar with a horizontal bed on top, or, in the case of the inverted T-beam, on the bottom. The upright portion carrying the tension of the beam is termed a web or stem, and the horizontal part that carries the compression is termed a flange. However, the materials used have changed over the years but the basic structure is the same.

2. Lods acting on a Bridge

Various types of loads are considered for design of bridge structures. These loads and their load combinations decides the safety of the bridge construction during its use under all circumstances. Different design loads acting on bridges are explained below.

1. Dead load
2. Live load
3. Impact load
4. Wind load
5. Longitudinal forces
6. Centrifugal forces
7. Buoyancy effect
8. Effect of water current
9. Thermal effects
10. Deformation and horizontal effects
11. Erection stresses
12. Seismic loads

2.1 Dead Load

The dead load is nothing but a self-weight of the bridge elements. The different elements of bridge are deck slab, wearing coat, railings, parapet, stiffeners and other utilities. It is the first design load to be calculated in the design of bridge.

2.2 Live Load

The live load on the bridge, is moving load on the bridge throughout its length. The moving loads are vehicles, Pedestrians etc. but it is difficult to select one vehicle or a group of vehicles to design a safe bridge.

So, IRC recommended some imaginary vehicles as live loads which will give safe results against the any type of vehicle moving on the bridge. The vehicle loadings are categorized in to three types and they are

Review On Design Optimization And Vibration Analysis Of Heavy Duty Leaf Spring By Using CAD Tool.

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²Vijay L. Bhambere, Head Of Department Of Mechanical Engineering Department, Jagadambha College of Engineering and Technology, Yavatmal, Maharashtra, India

Abstract: Leaf spring sets are mostly used in heavy duty vehicles to absorb shocks during running of vehicle. It is most popular and widely used component in suspension system for heavy duty vehicles. It is nothing but a set of metal strips which are grouped together in ascending order with respect to length. A central bolt is provided to hold all strips together.

It continuously works in worst conditions and absorbs shocks. Also it holds the entire weight of the vehicle. Hence the failure may accure rapidly in leaves. To avoid failure periodic inspection and maintenance is carried out. There are several other reasons of failure which depends on particular situation.

In this paper, the available literature is studied well and their explanations are given briefly. Also from this study the all possible troubleshoots and failure reasons are summarized. On the basis of this study outcomes were drawn.

Key Words: Lead spring set, leaf spring failure, periodic inspection

1. Introduction

Leaf springs are mainly used in suspension systems to absorb shock loads in automobiles like light motor vehicles, heavy duty trucks and in rail systems. It carries lateral loads, brake torque, driving torque in addition to shock absorbing. The advantage of leaf spring over helical spring is that the ends of the spring may be guided along a definite path as it deflects to act as a

structural member in addition to energy absorbing device. According to the studies made a material with maximum strength and minimum modulus of elasticity in the longitudinal direction is the most suitable material for a leaf spring. [1]

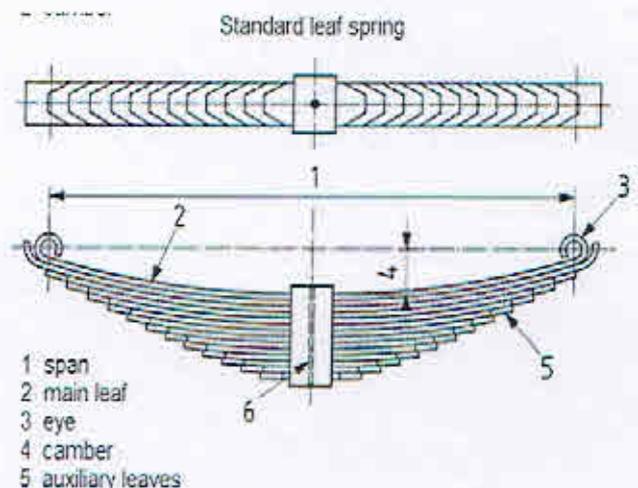
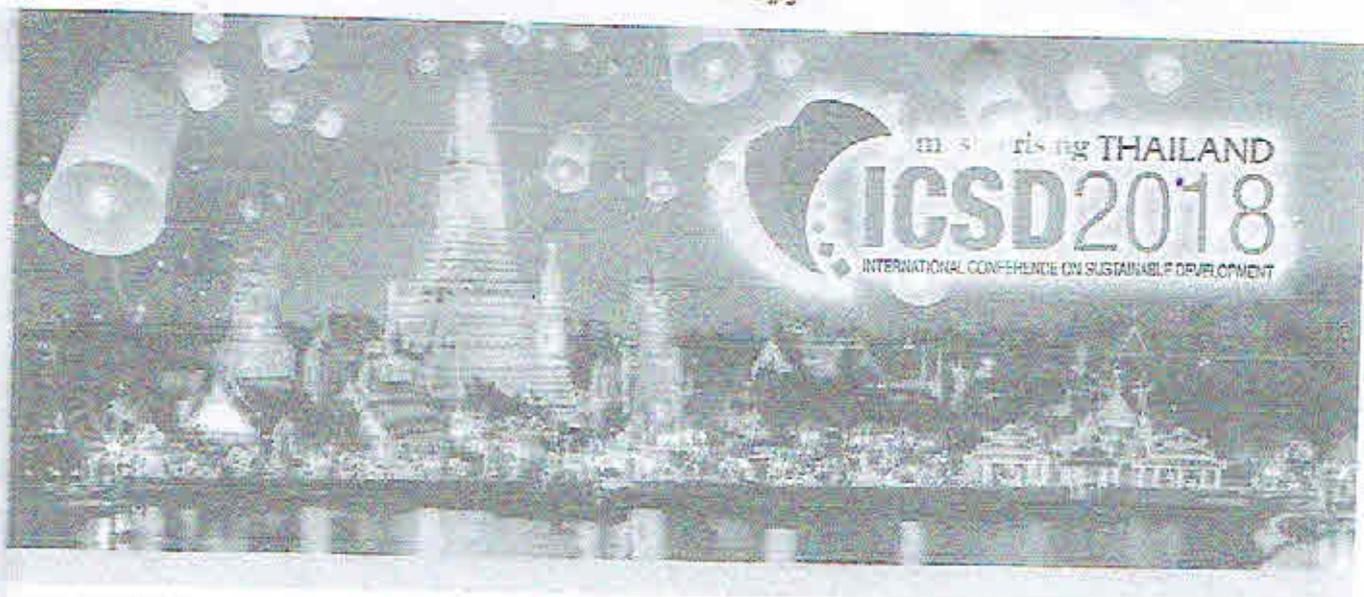


Fig. 1: Standard Leaf Spring Set. [2]

The advantages of the leaf spring are based on its simple construction, low costs and easy maintenance. The design also provides the solution for the axle support. Almost all vehicle suspension uses parabolic leaf springs. The difference between the normal leaf spring and the parabolic leaf spring is the total number of leaves. A parabolic leaf does not need of huge amount of leaves because the stress is distributed equally due to its parabolic shape.



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A Review on Vertical Axis Wind Solar Hybrid Power System

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ABSTRACT

Energy is essential for the economic growth and social development of any country. The quality of life is closely related to energy consumption, which has continuously increased over the last few decades in developing countries. The design of a hybrid electric power generation system utilizing both wind and solar energy for remote area is today's need. Wind power is the conversion of wind energy into a useful form of energy. Wind power, as an alternative to fossil fuels, is plentiful, renewable, widely distributed, clean, produces no greenhouse gas emissions during operation and uses little land. The effects on the environment are generally less problematic than those from other power source. The solar energy is available throughout year and it is free and clean sources of energy. The solar PV cells absorb the radiation of sun and converting it into the electrical power. The wind mill is capable to extracted energy in day and night time while the solar PV cell is capable to extracted the power only during day hours. The combination of this hybrid system will be beneficial in future aspects.

Keyword: Hybrid Renewable Energy, Solar Energy, Vertical Axis Wind Turbine

1. INTRODUCTION

Renewable energy researches, particularly wind and solar have been gaining popularity and recognized as potential sources for clean, inexhaustible and free energies. The concept of on-site renewable energy generation is to extract energy from renewable sources close to the populated area where energy is required. In the modern era, on-site energy extraction from renewable energy sources in urban settings is regarded as the next step in the process of reducing dependencies on the usage of conventional power generation using fossil fuels. A hybrid system consisting of wind and solar renewable energy sources is more beneficial than a system that only depends on one source of energy. Also, the power supply from a hybrid system is more stable and reliable. In addition, optimization of hybrid renewable energy system is crucial for researchers to maximize the energy output from the system with the lowest cost and highest reliability.


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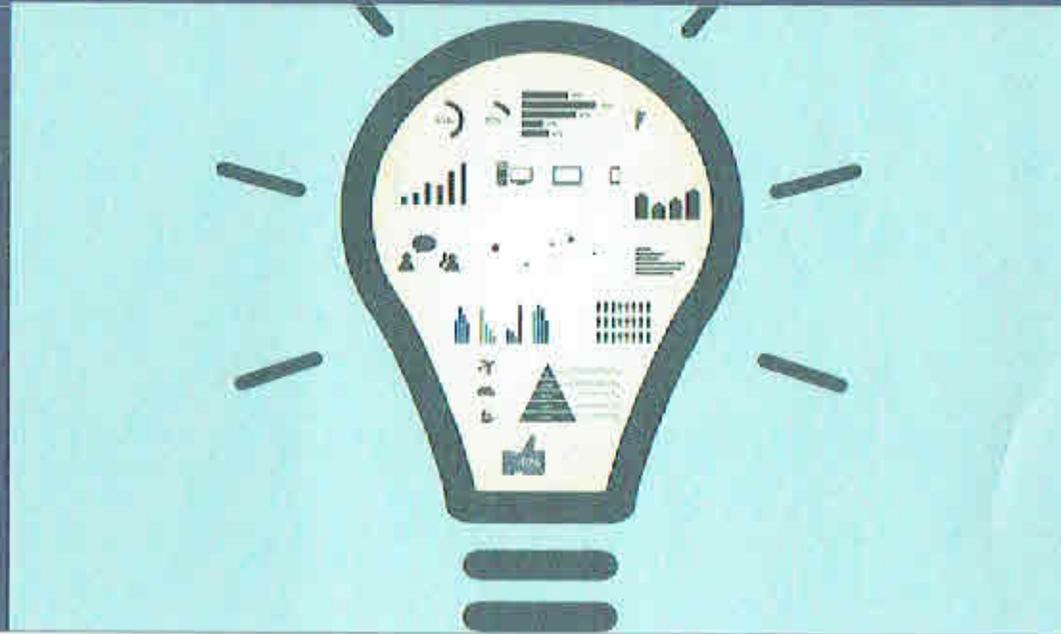
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Dear Reader, Technical interviews are difficult. I know—We've been on both sides of the desk. We've interviewed job candidates and We've been interviewed. Honestly We can think of many things that are more fun. Of course, there's a lot of pressure on the job candidate. You can attest to that. You want to let the interviewer know you are the best candidate for the job. But there's also a lot of pressure on the interviewer, who wants to make sure the person he/she hires is a good fit for the job and for the company in general. We've often heard from people who are stressed out over the job technical interview. Most people want to know what questions to expect and how to answer them. Being a part of Training and Placement Department, We get a lot of e-mail from people regarding creating good source where they get all technical questions and answers at same place. We wrote this book with all that in mind. Over 300 interview questions help prepare you for anything you might face. Read the answers carefully and use them to guide you in putting together your own responses. Hope this book will help you to crack your TECHNICAL INTERVIEWS. !! Good Luck!



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Amol V. Raikar MCA from Pune University. Having 6 Years of Corporate Experience. Working as Training and Placement Officer in JCOET, Yavatmal. Mayur R. Bhojar Pursuing M.Tech. in Computer Science Engineering from RGPV, Bhopal, India. Working as Training and Placement Coordinator in JCOET, Yavatmal.

Overview of Technical Languages with Questions and Answers

Computer Engineering



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Bhojar, Raikar



The use of the Internet and wireless networks to bring multimedia to the consumer continues to expand. With advancement in network technology, requirement for video streaming application is on the rise. In video streaming applications, the quality of service is usually not insured to reduce delay. The after effect of this approach is that there may be damage of a packet during video transmission which can corrupt block of data or even an entire video frame. Generally, User Datagram Protocol (UDP) is used which does not provide assured quality of service (QoS) in video transmission technology. Therefore, there is a requirement for video error concealment. The proposed method estimates missing block using reconstructed frame and the next frame for each pixel in the lost frame. Fast processing method to satisfy video latency requirements and low power requirements as devices are limited on battery power supply. Hence, it requires a fast, robust and simple algorithm for error concealment. Combination of wavelet transforms and spatio-temporal is implemented.

Image and Video Error Concealment



Aniruddha Shelotkar
Prashant Ingole

Dr. Aniruddha D. Shelotkar, Ph.D. from S. G. B. Amravati University, Amravati, Maharashtra, India in Electronics and Telecommunication Engineering. Dr. Prashant V. Ingole, Ph.D. from Visvesvaraya National Institute of Technology, Nagpur, Maharashtra, India in Electronics and Telecommunication Engineering.

Implementation and Analysis of Video Error Concealment Method

Steps towards High Quality Visual Experience



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Image concealment algorithm applied for BMP, DIB, EPI, EPS, GIF, JPC, JPEG, PCD, PCX, PDB, PDF, PGM, PICT, PNG, JPG, SVG, TGA, PSD extension of different sizes. The transmission of block-coded visual information over packet networks introduces fidelity problems in terms of data losses, which result in wrong reconstruction of block sequences at the decoder. Concealment techniques aim at masking the visual effect of these errors by exploiting either spatial or temporal available information. Both temporal and spatial approaches present drawbacks, the first is in general inefficient in handling complex or fast objects motion, while the second is computationally expensive and is not able to recover high-frequency contents and small details. In this paper, The technique first replaces the lost block with the best matching pattern in a previously decoded frame using the border information. The first step is achieved by a fast matching algorithm for a high precision is not needed. While the second step recover damaged part of image and boundary of images.



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Image Error Concealment Technique Using Boundary Matching Algorithm



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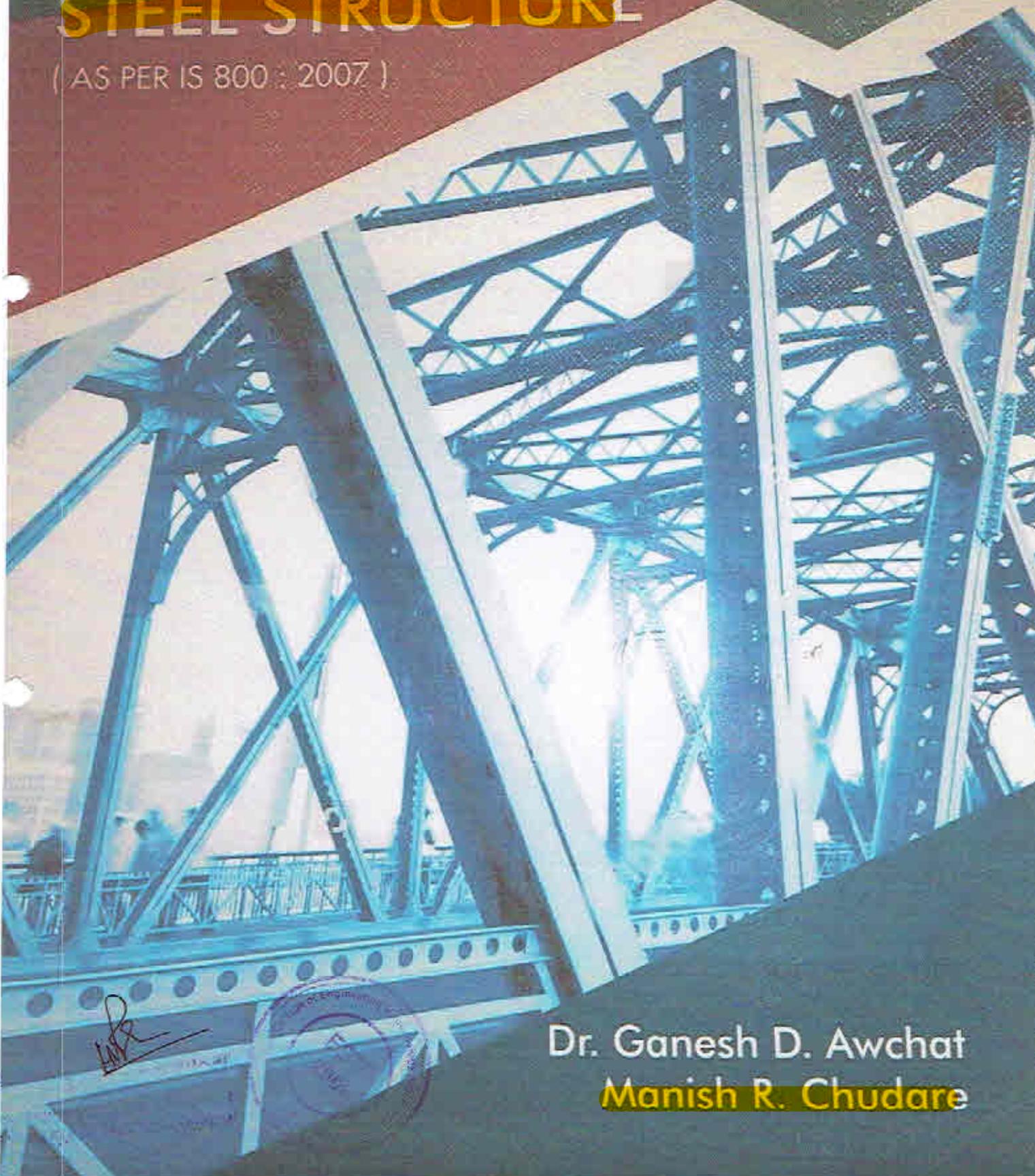


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Characterization of voltage sag due to faults and induction motor starting

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- Abstract
- Document Sections
 - I. Introduction
 - II. Voltage Sag (DIP)
 - III. System Under Study
 - IV. Results and Discussions
 - V. Statistical

Abstract:
 The demand of power quality is increasing due to fact that the equipment's in power system are much more sensitive to power quality problems. Electronic instruments are much more sensitive to voltage variation. This rising sensitivity of instruments has drawn attention to more awareness of voltage dips. The Objective of this paper is to characterize the voltage sags due to faults and induction motor starting in power system. The IEEE distribution system is simulated in PSCAD. The output of PSCAD is given to MATLAB. In MATLAB program feature extraction is carried out with the help of Wavelet transform. Various statistical parameters are determined and used as an input to ANN for characterization of voltage sags.

Published in: 2017 International Conference on Energy, Communication, Data Analytics and Soft Computing (ICECDS)

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Realization of 5-bus system using soft computing technique for flexible alternating current transmission system (FACTS) devices

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Abstract

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- I. Introduction
- II. Soft Computing Techniques
- III. Sensitivity Analysis Methods
- IV. Proposed System Description

Abstract: Total transfer capability analysis of power system is currently a critical issue in both planning & operating of systems. These issues mainly occur due to increase in area and interchanges among utilities. To reduce the flows in heavily loaded lines, Flexible Alternating Current Transmission System (FACTS) devices is used, this results in increased transfer capability, improve stability of the network, low system losses, and fulfil contractual required by controlling the power flows in the network. To achieve parameters FACTS devices are placed optimally and is done with the help of reduction of total system reactive power loss sensitivity indices analysis method and real power flow performance index sensitivity indices analysis method. Thyristor-Control-Series-Capacitor (TCSC) is used as a FACTS device in the proposed sensitivity analysis method. To decide priority of line for placing TCSC, soft computing technique "Fuzzy logic method" is employed. The performance evaluation of proposed sensitivity analysis methods is done using electrical IEEE-5 bus system. The sensitivity indices are programmed using Matrix Laboratory.

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Development of Automated system for Measurement and Analysis of Gestational age for monitoring fetal Growth

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Abstract— Gestation is defined as a interval of time between thought and start. Estimation of gestational age is necessary in order to foretell the early date of delivery and screen the development of fetus during the three trimester of pregnancy. Comparison of gestational age is centered on size of quite a lot of fetal biometric parameters like gestational sac, bi-parietal diameter, femur size, belly circumference, head circumference for the period of the gestation period. In medical photo processing, ultrasound technique performs a major position for imaging organs for an obstetrician and gynecologist. Monitoring of those parameters is finished with human interplay. These methods are liable for a couple of subjective decisions which increase the inter-observer error. The foremost function of this work is to measure fetal biometric parameter for correct estimation of gestational age. An automated computer headquartered algorithm has been used to apply morphological operation in order to admire the desired parameter contour in the ultrasound picture, refine its shape and catch up on targeted irregularities, then properly measure its size, achieving premiere accuracy and reproducibility of measurements. Automation algorithm makes use of morphological operation, Hough transform and tracing ways. It has been found that, the proposed scheme, is competent to estimate the gestational age of the fetus with a prediction accuracy of +2 days.

Keywords—Hough transform analysis, morphological operation, Gestational Sac, Bi-parietal diameter, Head Circumference, Femur length, Filtration.

I. Introduction

The obstetric care has been enhanced with the development within the area of computer technology in the recent prior. Correct estimation of gestational age is desirable for monitoring and accessing the fetal progress. It additionally confirms health of the pregnancy particularly in patient with the historical past of bleeding/pain, principally in high danger pregnancies [1]. These estimations have also been anticipated to furnish useful understanding to take decisions in three trimesters of pregnancy. Fetal growth assessment by ultrasound analysis depends on correct estimation of Yolk Sac (YS), Gestational SAC (GS), Crown Rump size (CRL), Femur length (FL), Head Circumference (HC), abdominal Circumference (AC) and Biparietal Diameter (BPD). In first trimester evaluation of Gestational sac, Yolk sac, Crown rump size performs an major position in predicting the gestational age [1]. In second and 0.33 trimester extraction of Femur size, stomach Circumference, Biparietal diameter, Head circumference of fetus is finished to predict the gestation interval effectively. In implemented scheme extracted parameters incorporate GS, FL, BPD which can be used for the development of automated medical decision help approach (ACDSS) in obstetrics and gynecology.

Comparison of gestational age is established on sufferer historic information and the bodily examination, maternal sensation of fetal action [5]. With the appearance of ultrasound, obstetrics examination has been made less complicated and accordingly noninvasive process has been

used for extraction of fetal biometric parameter. For assessment of quite a lot of parameters, gynecologist first freeze the ultrasound picture of favored biometric parameter, consequently, opting for two elements on the boundaries of parameter by using utilising pleasure sticks or mild pens to measure its length. Accordingly output in phrases of length of parameter is displayed. This process involves more than one subjective decisions increasing the inter-observer error. Considering of tedious and time drinking nature of handbook measurement an automatic system is crucial which objectives to locate the contour segment of favored parameter thoroughly.

Ultrasound pictures are the outcomes of reflection, refraction and deflection of ultrasound beams from quite a lot of forms of tissue with distinct acoustic impendence. Therefore these photos are characterized by using a couple of forms of perturbations: elimination of real structural echoes, displacement and distortion of echoes [8]. In addition, echography includes powerful presence of speckle and additive noise. It additionally include presence of different highly echogenic adjacent to the pinnacle contour and non-uniform bone texture. In addition, the acoustic beam deflections on the bone surface explanations a transformation within the wave propagation direction, for this reason weak echoes are detected through transducer on the assumed attitude of reflection. These entire reasons make the analysis of ultrasound images more complex. Consequently computerized segmentation of those photographs is crucial.

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MODIFIED MULTI – MEDIA FILTER FOR DOMESTIC WASTEWATER TREATMENT

28

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Abstract: Water is one of the most vital elements involved in the creation and development of healthy life. Since water is such a important resource for survival of both plants and animals, it is our responsibility to manage this resource, not only as a social, industrial and commercial good but also for the sustainable benefit of all living matter. Increasing pressure to get more stringent discharge standards or not being allowed to discharge treated effluent has led to implementation of a variety of advanced biological treatment processes in recent years. Current and future fresh water demand could be met by enhancing water use efficiency and demand management. Thus, wastewater is emerging as potential source for demand management after essential treatment. Biological treatment is an good and important part of any wastewater treatment plant that treats wastewater from either municipality or industry having soluble organic impurities or a mix of the two types of wastewater sources. The main advantage of attached growth systems is that they maintain a high concentration of microorganisms resulting in high removal rates at relatively small hydraulic retention times. The basic design and operational characteristics of various systems are presented in terms of packing materials, organic loading rates, treatment temperature, as well as achieved removal rates. Filtration technology is a low cost treatment technology based on physical process to treat wastewater by removing contaminant like COD, BOD, turbidity and suspended solids for a wide range of applications in domestic as well as industrial applications. Research on alternate filtration media, has expanded the options available for improving effluent quality.

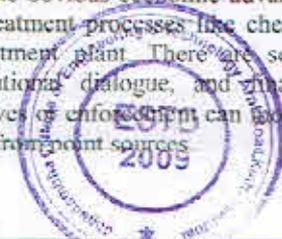
Keywords— Filtration, Domestic Wastewater, Packing materials, Multi – Media Filters.

I. INTRODUCTION

Wastewater is any water that has been adversely affected in quality by anthropogenic influence. It comprises liquid waste discharged by domestic residences, commercial properties, industry, and/or agriculture and can encompass a wide range of potential contaminants and concentrations. In the most common usage, it refers to the municipal wastewater that contains a broad spectrum of contaminants resulting from the mixing of wastewaters from different sources. Wastewater also known as sewage originates from residential commercial and industrial area. Wastewater engineering is that branch of environmental engineering in which the basic principles of science and engineering are applied to solving the issues associated with the treatment and reuse of wastewater. The ultimate goal of wastewater engineering is the protection of public health in a manner commensurate with environmental, economic, social, and political concerns. When untreated wastewater accumulates and is allowed to go septic, the decomposition of the organic matter it contains will lead to nuisance conditions including the production of malodorous gases. In addition, untreated wastewater contains numerous pathogenic microorganisms that dwell in the human intestinal tract.

Wastewater also contains nutrients, which can stimulate the growth of aquatic plants, and may contain toxic compounds or compounds that potentially may be mutagenic or carcinogenic. For these reasons, the immediate and nuisance-free removal of wastewater from its sources of generation, followed by treatment, reuse, or dispersal into the environment is necessary to protect public health and the environment. Wastewater facilitates treatment and reduces risk. Strengthening institutional capacity and establishing links between water delivery and sanitation sectors through inter-institutional coordination leads to more efficient management of wastewater and risk reduction. Filtration is one of the oldest and simplest methods of removing those contaminants. Generally, filtration methods include slow sand and rapid sand filtration. Reliable operation for sand filtration is possible when the raw water has low turbidity and low suspended solids. For this reason, when surface waters are highly turbid, ordinary sand filters could not be used effectively. Therefore, the roughing filters are used as pre-treatment systems prior to sand filtration. Furthermore, roughing filters could reduce organic matters from wastewater. Therefore, roughing filters can be used to polish wastewater before it is discharged to the environment.

Besides that, the purpose of wastewater treatment is to remove pollutants that can harm the aquatic environment if they are discharged into it. Because of the deleterious effects of low dissolved oxygen concentrations on aquatic life, wastewater treatment engineers historically focused on the removal of pollutant that would deplete the DO in receiving waters. Biological treatment is an important and integral part of any wastewater treatment plant that treats wastewater from either municipality or industry having soluble organic impurities or a mix of the two types of wastewater sources. The obvious economic advantage, both in terms of capital investment and operating costs, of biological treatment over other treatment processes like chemical oxidation; thermal oxidation etc. has cemented its place in any integrated wastewater treatment plant. There are several opportunities for improving wastewater irrigation practices via improved policies, institutional dialogue, and financial mechanisms, which would reduce risks in agriculture. Effluent standards combined with incentives of enforcement can motivate improvements in water management by household and industrial sectors discharging wastewater from point sources.

Video Error Concealment using H.264/AVC

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Abstract— The paper presents a novel video error concealment algorithm based on directional decision and intra prediction. Unlike previous approaches that simultaneously recover the pixels inside a missing macro block (MB), we propose to recover them 4×4 block by 4×4 block. Each missing 16×16 MB in an intra frame is divided into 16 blocks each with size 4×4 first, and then recovered block by block using Intra_4×4 prediction. The previously-recovered blocks can be used in the recovery process afterwards. The principle advantage of this approach is the improved capability of recovering MB with edges and the lower computational complexity. The proposed algorithm has been tested on the H.264/AVC reference software JM7.2. Experimental results demonstrate the advantage of the proposed method.

Key Words— Forward Error Concealment, interpolation, Bottom to top & Top to bottom approach, joint source channel coding, robust video transmission, video system model.

I. INTRODUCTION

Due to the rapid growth of wireless communications, video over wireless networks has gained a lot of attention. Wireless communications has had the most important development. At the beginning, wireless communications was conceived for voice communication. However, nowadays it is able to provide a diversity of services, such as data, image, audio and video transmission thanks to the apparition of third and fourth generation (3G/4G) developments of cellular telephony.

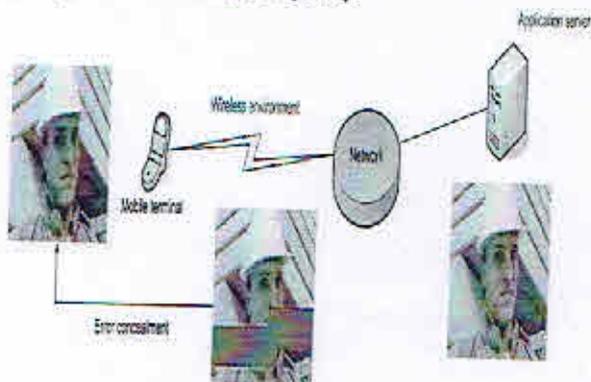


Figure 1.1

Figure 1.1 illustrates a 3G/4G cellular telephony system where a user, with his mobile terminal, demands a video streaming service. The video stream comes from the application server over the network. Then it is transmitted over the wireless Environment to the user. During the transmission, the Image, video signal is error prone. This system, because of the bandwidth limitation, works with low resolution (QCIF 176 x 144) videos so the loss of one

packet means a big loss of information. Since this process is a real time application it is not possible to perform retransmissions. The only way to fix the errors produced by packet losses is by using error concealment methods in the mobile terminal. The focus of this thesis is on spatial and temporal correlations of the Image and video sequence to conceal the errors. The main task of error concealment is to replace missing parts of Image and video content by previously decoded parts of the Image, video sequence in order to eliminate or reduce the visual effects of bit stream error. The error concealment exploits the spatial and temporal correlations between the neighboring image parts (macro blocks) within the same frame or the past and future frames. Techniques using these two kinds of correlation are categorized as spatial domain error concealment and temporal domain error concealment.

The spatial domain error concealment utilizes information from the spatial smoothness nature of the video image, and each missing pixel of the corrupted image part can be interpolated from the intact surrounding pixels. The interpolation algorithm has been improved by the preservation of edge continuity using different edge detection methods. The temporal domain error concealment utilizes from the temporal smoothness between the adjacent frames within the video sequence. The simplest implementation of this method is to replace the missing image part by spatially corresponding part within a previously decoded frame, which has the maximum correlation with the affected frame. The copying algorithm has been improved by considering the dynamic nature of the video sequence. Different motion estimation algorithms have also been integrated to apply motion compensated copying. There are still no standardized means for the performance evaluation of error concealment methods. To evaluate the quality of reconstruction, typically peak signal to noise ratio (PSNR) and structural similarity index metric (SSIM) are used. The focus of this thesis is the performance indicators for evaluating the error concealment methods. To test the performance evaluation methods, H.264 video codec is used. H.264 is the newest codec in video compression, which provides better quality with less bandwidth than the other video coding standards such as H.263 or MPEG-4 part-2. This feature is very interesting for mobile networks due to the restricted bandwidth in these environments.

II. THE PROPOSED EC ALGORITHM

A block diagram of real-time video communications system is shown in Fig. 1.1. The input video is encoded using appropriate video compression syntax. The transport

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A Study on Partial Replacement of Cement By Waste Paper Pulp In Concrete

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Abstract –Among different waste materials produced in different factories of India, paper industry waste, paper pulp is a noticeable one as it poses problems of health, hazards and disposal. Paper pulp is a growing problem in India as landfill spaces are used up every year causing the decrease of cultivable lands. In some cases, crop lands are used for dumping pulp which reduces fertility and a threat to human health. Disposal of pulp into rivers and canals causes severe water pollution. Some paper mill companies try to get rid of it by using incinerators to burn it causing air pollution. It is reported that waste paper pulp has pozzolanic as well as cementations properties which may be used as partial replacement of cement clinker in concrete production. This paper deals with experimental investigations to evaluate the optimum percentage of waste paper pulp to be used for making concrete.

The M25 grades of concrete were used in this study. Three different replacement level of cement with waste paper pulp i.e. 5, 10, and 15% were used and PPC concrete of 0% cement replacement level was also made for comparison. Compressive test strength of concrete were tested at a curing age of 7 and 28 days. Overall result reveals that use of paper pulp as partial replacement of cement can improve the strength of lower grade concrete upto 20% replacement level. Use of waste paper pulp as partial replacement of cement also markedly reduces the cost of construction which otherwise been dumped making environmental hazard.

Keywords–compressive strength, slump value, water absorption capacity of concrete.

I- INTRODUCTION

At the recent days the development of our country is in the rising graph in various department like in civilization and in industry but when in industry production of materials as well as waste material are made and hence there is need to dispose of this waste

material or reuse in Construction work for the minimize the cost of construction and maintained environment pollution free. Concrete is Composite construction material composed of cement, aggregate (Course aggregate made of gravels or crush of rocks such as limestone or granite plus fine aggregate such as sand) water, admixture as per mixed design. The concrete made with OPC is relatively strong in compression but weak in tension and tends to be brittle. These two weaknesses have limited its use. Another fundamental weakness of concrete is that cracks start as soon as concrete is placed and before it hardened properly. These cracks are major cause of weakness in concrete particularly in large on-site applications leading to subsequent failure and effect the durability.

India is facing a serious challenge in disposing waste in many landfills throughout the country. The landfill situation is resulting in high disposal costs and potential environmental problems. If current trend continues, with waste production projected to grow by 5% each year, landfills would be at full capacity by 2025.

Paper pulp contains low calcium and maximum calcium chloride and minimum amount of silica. Paper pulps behave like cement because of silica and magnesium properties. This silica and magnesium improve the setting of concrete. Paper pulp consist of cellulose Fibers, calcium carbonate, china clay and residual chemicals which bound up with water. Paper pulp is beneficial to the concrete while helping to economy. The use of paper pulp in concrete can save the paper waste disposal cost and produced green concrete for construction. Paper waste has been used as building material for decades, especially in cementation matrices and since then a lot of research has been done to develop



"A REVIEW ON RC DRONE QUADCOPTER AS SPY CAM"

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ABSTRACT: The aim of this paper is to design a light weight quad copter with spy cam. The quad copter will be controlled from a RC (Remote controlled) from a certain distance wirelessly. This small and highly manageable system would acquire data such as video/images from a camera installed in the quad copter and send them to the base station. The project would have an impact on carrying out future rescue missions and would provide visual and audio aid to the people in distress. It will have the ability to help assist, locate and save victims, faster with more efficiency than any other option. It could also be used as a measure for survey or surveillance.

Keywords:-Quad copter, Remote Controller, surveillance

1. INTRODUCTION

Quad copter is a drone which is the next form of helicopters having more dynamic stability than helicopters. It is a small type of Unmanned Aerial Vehicle (UAV). Unmanned Aerial Vehicles have most often been used in the field of military but they are also used for search and rescue, surveillance, traffic monitoring, weather monitoring, firefighting, research applications in scientific community, fire sensing and some important areas. Quad copters are unmanned aerial vehicles with ability of vertical take offs, landings and hovering at a desired location. Quad copter consists of four rotors which are attached at the end of the frame structure. A pair of rotors in one arm facing each other rotates in clockwise direction while the adjacent pair of rotors rotates in anticlockwise direction. Therefore, the

Resultant torque acting on the air frame structure is zero. Quad copter is a device with an intense mixture of electronics, mechanical and mainly on the principle of aviation. The Quad copter can be customized and sized according to our own convenience. It can be designed as much small as we want by using the small sized components we need to make it.

A Quad copter is a multi-rotor helicopter that is lifted and propelled by four rotors which is operated to fly independently. It is a type of a small representation of Unmanned Aerial Vehicle (UAV). Quad copters are classified as rotorcraft, as opposed to fixed-wing aircraft, because their lift is generated by a set of rotors (vertically oriented propellers). It has four rotating blades that collectively produce thrust to lift the whole thing up. Two rotate clockwise and two anticlockwise so it does not keep spinning. The interesting part is that all four of the rotors must be continuously controlled in speed for the system to stay stable in air. It is not the same as setting each at the same speed since the imbalance in weight will cause it to drift towards one side. Hence it is a control system with the

input being its orientation-tilt, movement, acceleration and output being the speed of rotation of each motor balanced propellers, forcing the air flow down it generates the thrust to lift the Quad copter above the surface. The Quad copter can be sized according to our own convenience. It can be designed as much small as we want by using the small sized components we need to make it.

2. LITERATURE REVIEW

Prof. A. V. Javir, Ketan Pawar, Santosh Dhudum, et al. [2], this paper focuses on the aerodynamic effects of a quad copter and addresses all the aspects of quad copter ranging from mechanical design to the components used. It provides backup to the selection of different components with the help of various formulas from research papers. It also gives clear results with respect to weight of components and their corresponding costs.

YiwenLuo, MengJooEr, et al. [3], presented an approach to develop an intelligent control and navigation system of an indoor quad copter. It documents developing a stabilized flying control system with low cost components such as the budget friendly Raspberry Pi computer including traditional PID controller, and electronic speed controller developed to provide the basic platform for the quad copter. PID tuning is utilized to optimize the overall performance. Also, RGB and depth cameras and other sensors are deployed to enable remote semi-autonomous control.

Gordon Ononiwu, Arinze Okoye, et al. [4], this paper presents the design and implementation of an aerial surveillance quad copter for search and rescue applications. The first phase of the paper considered modelling of the quad copter while the second phase involved system implementation.

A Comparative Study on Nominal Mix With Partially Replaced Cement By Paper Pulp Mix (Trial Mix)

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Abstract –Environmental problems are growing due to release of CO₂ in the construction process of cement, it is producing harmful effects on environment. And also shortage of conventional construction materials such as cement, gravels and sand is increasing, because of the higher growth in construction work. Hence alternates are strongly required for these materials. An ordinary Portland cement is caused to five to seven percent of total greenhouse gases emission, so alternative of cement is required for construction of concrete. At the present time researchers searched some substitute for these materials such as fly ash, blast furnace slag, silica fume, rice husk ash, etc apart from this the recent studies research has shown that the paper pulp is also useful for construction of concrete as a fine aggregate. Paper pulp contains low calcium and minimum amount of silica, because of this silica and magnesium paper pulp can be used like cement, paper pulp reduces cost of concrete and also it improves the strength of concrete. This study explains the application of paper pulp as a substitute for binding material in concrete. This paper reviews the performance properties of paper pulp in concrete. Paper pulp can be used as an effective building material. The M25 grades of concrete were used in this study. three different replacement level of cement with waste paper pulp i.e. 5,10, and 15% were used and PPC concrete of 0% cement replacement level was also made for comparison. Compressive test strength of concrete were tested at a curing age of 7 and 28 days. Overall result reveals that use of paper pulp as partial replacement of cement can improve the strength of lower grade concrete upto 20% replacement level. Use of waste paper pulp as partial replacement of cement also markedly reduces the cost of construction which otherwise been dumped making environmental hazard.

Keywords–compressive strength, slump value, nominal mix, trial mix.



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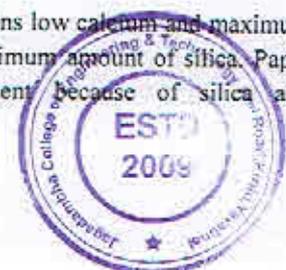
1- INTRODUCTION

At the recent days the development of our country is in the rising graph in various department like in civilization and in industry but when in industry production of material as well as waste material are made and hence there is need to dispose of this waste material or reuse in construction work for the minimize the cost of construction and maintained environment pollution free.

Concrete is Composite construction material composed of cement, aggregate (Course aggregate made of gravels or crush of rocks such as limestone or granite plus fine aggregate such as sand) water, admixture as per mixed design. The concrete made with OPC is relatively strong in compression but weak in tension and tends to be brittle. These two weaknesses have limited its use. Another fundamental weaknesses of concrete is that cracks start as soon as concrete is placed and before it hardened properly. These cracks are major cause of weakness in concrete particularly in large on-site applications leading to subsequent failure and effect the durability.

India is facing a serious challenge in disposing waste in many landfills throughout the country. The landfill situation is resulting in high disposal costs and potential environmental problems. If current trend continues, with waste production projected to grow by 5% each year, landfills would be at full capacity by 2025.

Paper pulp contains low calcium and maximum calcium chloride and minimum amount of silica. Paper pulp behaves like cement because of silica and



Transparent Concrete: An Evolution Towards Better India

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Abstract –Transparent concrete is a concrete based building material with light transmissive property due to embedded light optical elements usually optical fibers. There are many varieties of concrete, depending on what people want to achieve. By changing its chemical composition, technological process and adding various other materials, we receive various types of concrete. We use them to create durable supporting structures, a variety of concrete which is resistant to constant moisture or different chemical types. Additionally, some aspects of aesthetics in architecture are made with the help of concrete.

Light is conducted through this fiber from one end to another end. Therefore the fibers have to go through the whole object. Transparent concrete is also known as translucent concrete or light transmitting concrete because of its properties. The main purpose is to use sunlight as a light source to reduce the power consumption. This concrete is used in architectural purpose for good aesthetical view of building.

Keywords:- Transparent concrete, optical fibers, light transmissive property.

I- INTRODUCTION

The Concrete has been used since Roman times for the development of infrastructure and housing but its basic components have remained the same. In 2001, the concept of transparent concrete was first put forward by Hungarian architect at the Technical University of Budapest. Hungarian architect, Aron Losonczy, first introduced the idea of light transmitting concrete in 2001 and then successfully produced the first transparent concrete block in 2003, named LiTraCon.

By research and innovation, newly developed concrete has been created which is more resistant, lighter, white or colored. The first transparent concrete block was successfully produced by mixing large amount of glass fiber into concrete in 2003, named as LiTraCon.



Fig 1: Picture of LiTraCon light transmitting concrete

II- INGREDIENT

- ▶ **Cement:** It is a binder, a substance that sets and hardens as the cement dries and also reacts with carbon-di-oxide and can bind other materials together. As the optical fiber is only responsible for transmission of light, there is no special cement required. So, ordinary Portland cement is used for transparent concrete.
- ▶ **Fine aggregate:** it is a chemically inactive material, most of which passes through a 4.75 mm IS sieve. The fine aggregate serve the purpose of filling all the open spaces in between the particles. Thus, it reduces

Partial Replacement of PPC with Glass powder

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Abstract—Disposal problem of waste material is becoming critical day by day. Millions tone of waste glass powder generated every year in world. In this topic, attempt has been made to utilize glass powder, which is waste of glass industry. The research work is determination of the effect the use of Glass powder as a replacement of cement to assess the pozzolanic nature of fine glass powder when mixed in concrete and compare the difference in performance with other pozzolanic materials are mixed in concrete like silica flume and fly ash. The concrete in place of cement to some extent i.e., 10%, 20%, 30% and mechanical properties of M40 (Design Mix) are investigated. Cube specimen of 36 numbers were cast, cured and tested for 3, 7, and 28 days strength. Compression was conducted and the results were compared. The finding revealed an increase in compressive strength with the increase in the replacement of cement by Glass powder. To reduce the demand of cement, glass powder decreases the unit weight as well as the porosity as indicated by decrease in water absorption. It reduce the quantity of cement to be used in concrete. Also glass powder is proved to be economical and is considered as environmental friendly construction material.

Key Words – Glass Powder, Replacement to PPC, compressive and tensile strength, cost effective material, M40 (Design Mix).

I. Introduction

1.1 General Information

Cement- based materials are the most abundant of all man-made materials and are among the most important constructional materials and it is most likely that they will continue to have the same importance in the future; however these construction and engineering materials must meet new and higher demands. When facing issues of productivity, economy, quality and environment, they have to compete with other construction materials such as plastic, steel, wood. Concrete is the 2nd largest of the most widely used materials; but there are environmental issues associated with its use which are needed to be taken under consideration and cannot be ignored. Concrete production uses large quantities of natural resources as aggregates and contributes to the release of carbon dioxide during the production of cement.

In sustainable construction importance of waste materials usage in concrete is increasing in manner. The waste glass from small shops is disposing it as a landfill waste. Without changing its chemical property the glass can be used so many times. This waste glass is used for water filtration, grit plastering, sand cover for sport turf and sand replacement in concrete.

Each year about 62 million tons of waste glass is generated in the India, 77% of which is disposed of in landfills, accounting for 6 wt. % of the total municipal solid waste stream. Globally, about 5 wt. % of the 27.02 billion tons/year of municipal solid waste generated is glass. Postconsumer waste glass can be cost-effectively collected in mixed color; there are, however, limited markets for mixed color waste glass. Disposal of waste glass in landfills is costly, considering increasing tipping fees; the non - biodegradable nature of glass further complicates the environmental impact of its disposal in landfills. Stricter environmental regulations and the scarcity of landfill space are other factors encouraging diversion of waste glass from landfills for value-added use in new applications. The reuse of very finely ground waste glass in concrete has economical and technical advantages. If the glass could be ground to a very fine size, it could satisfy the active pozzolanic behavior. Glass waste is recognized to be increasing year by year in a large volume from shops, construction areas and factories. These waste storage disposals are becoming a serious environmental problem.

Due to global warming the need to cut down energy consumption has increased. The effect of global warming has impacted everyone on the planet and is a well-recognized concept. The interest of construction community in using waste or recycled materials in concrete is increasing because of the emphasis placed on sustainable construction. Presently the waste glass in and around the small shops is packed as a waste and disposed as landfill. Waste glass contain high silica (SiO₂) i.e. 72%. Waste glass when ground to very fine powder (600

Partial Replacement of Cement In Concrete With Sugarcane Bagasse Ash

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Abstract – Concrete is the mixture of cement, fine aggregate, coarse aggregate and water. concrete plays a vital role in the development of infrastructure in this experimental study investigation on SCBA (Sugarcane Bagasse Ash) has carried out which is a byproduct of sugarcane and also can be used as partial replacement material with ordinary Portland cement in concrete. The higher amount of silica present on it reacts with the component of cement hence increase the properties of cement. This experimental study focus on strength characteristics analysis of M20 grade concrete with replacement of cement by SCBA 10%, 20%, 30% and compare with plain cement concrete mixture in terms of compressive strength of cube for 7 days, 14 days and 28 days respectively.

It was found that the use of SCBA up to 25% in a concrete mix as replacement of cement gives more strength than the conventional concrete get reduces.

Keywords- sugarcane bagasse ash, concrete, compressive strength

INTRODUCTION

Concrete is typically an enormous individual material element in built environment. If the concrete can be reduces without decreasing the performance or increasing the cost, significant environmental and economical benefits may be realized. Concrete mainly comprises of Portland cement, sand, aggregate and water. Sugarcane bagasse ash is cementations material that can act as a partial replacement for Portland cement without significantly compromising that compressive strength. SCBA is a byproduct of sugar factories found after burning sugarcane bagasse.

Sugarcane is one of the major crop grown in 110 country and its total production is over 1500 million tons. India it self produce 300 million tons of

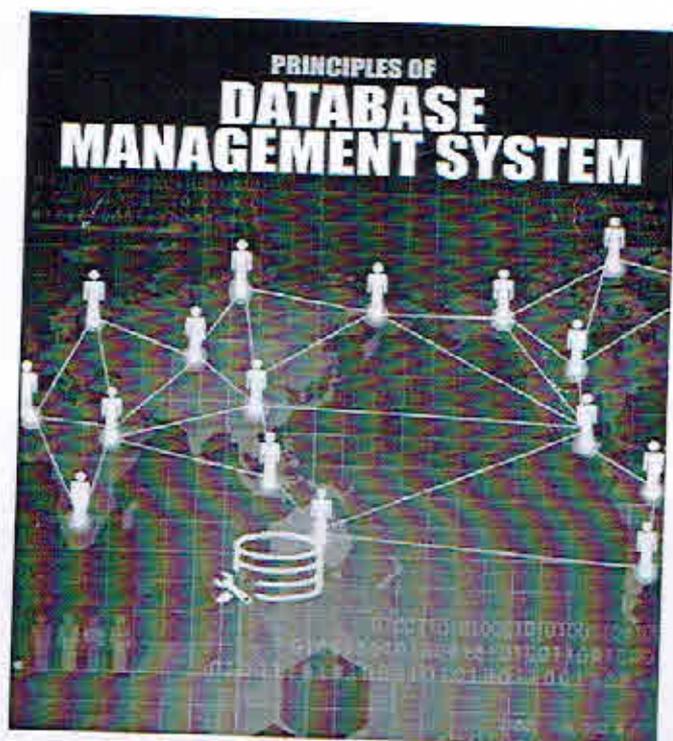
sugarcane per year it causes about 30% of sugarcane bagasse and 8 to 10% of bagasse ash. The amount of silica present in a bagasse reacts with component of cement and not only reduce the environmental pollution but also enhance the properties of cement.

The component of SCBA contain SiO_2 66.89%, Al_2O_3 29.18%, CaO 1.92%, MgO 0.83% with can be used as an alternative source to replace cement by SCBA partially. Concrete property will maintained with the advance mineral and mixture such as SCBA powder and partial replacement of cement 0%, 10%, 20% and 30%. Compressive strength of SCBA concrete with different dosage of SCBA was studied as a partial replacement of cement.

Environmental sustainability is at steak both in terms of damage caused by the extraction of raw material and CO_2 emission during cement manufacture. these brought presser on the researcher for the reduction of cement consumption by partial replacement of cement by supplementary material which is naturally occurring, industrial waste or byproduct that are less energy intensive.

From the structural point of view, when cement is replace by SCBA, lower heat of hydration and higher obstructed to sulphate and chloride intrusion. Lately some attention has been given to the use of natural pozzolonas like SCBA as partial replacement of cement. the various methods use to improve the durability of concrete, and to achieve high performance concrete, the use of SCBA is relatively new approach. The present paper focus on the investigating characteristics of M20 grade concrete with partial replacement of cement with SCBA by replacing cement 0%, 10%, 20% and 30%. the cubes and cylinder are tested for compressive strength and split tensile strength respectively.





**Principles Of Database
Management System**

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A. Kolpyakwar Prof. Ritesh Vilasrao
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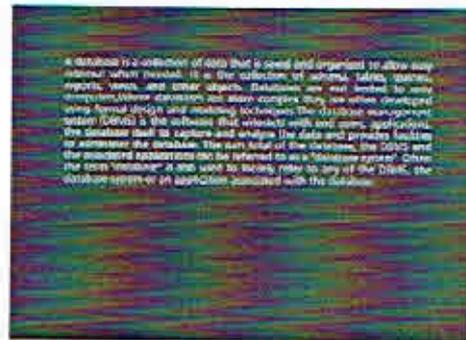
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Database Management System with NoSQL



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A database is a collection of data that is saved and organized to allow easy retrieval when needed. It is the collection of schema, tables, queries, reports, views, and other objects. Databases are not limited to only computers, Where databases are more complex they are often developed using formal design and modeling techniques. The database management system (DBMS) is the software that interacts with end users, applications, the database itself to capture and analyze the data and provides facilities to administer the database. The sum total of the database, the DBMS and the associated applications can be referred to as a database system. It can also be used to loosely refer to any of the DBMS, the database system or an application connected with the database.

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Fundamentals of Data Structures and Algorithms

Data Structure and Algorithms



Data structure is a representation of the logical relationship existing between individual elements of data. Data Structure is a way of organizing all data items that considers not only the elements stored but also their relationships to each other. We can also define data structure as a mathematical or logical model of a particular organization of data items. The representation of particular data structure in the main memory of a computer is called as storage structure. The storage structure representation in auxiliary memory is called as file structure. It is defined as the way of storing and manipulating data in organized form so that it can be used efficiently.



Prof. Anirudha A. Kolpyakwar is Assistant Professor in Department of Computer Engineering at Jogadamba College of Engineering and Technology, obtained his B.E. (Informative Technology) from SOBHU, Amravati, M.Tech in Computer Science & Engg from ITMNU, Nagpur. He published various papers in International Journals and Conferences.



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**“AN AUGMENTED REALITY APPLICATION FOR LEARNING PRACTICAL LAB
EQUIPMENTS”**

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ABSTRACT: *Augmented Reality (AR) is one of the newest innovations in the electronics industry. Augmented Reality (AR) is an emerging form of experience in which the Real World (RW) is enhanced by computer-generated content tied to specific locations and/or activities. Over the last several years, AR applications have become portable and widely available on mobile devices. Augmented reality systems superimpose graphics for every perspective and adjust to every movement of the user's head and eyes. Augmented reality is the merging of synthetic sensory information into a user's perception of a real environment. Augmented reality is implemented using ARToolKit in many applications like medical, manufacturing, Robot path planning, Entertainment, annotation and visualization, education institutes and many which require heavy Head Mounted Devices along with graphics kit. So, in this paper, AR is implemented using image processing in MATLAB which even reduces hardware and easily can be used in technological institutes as MATLAB is available. This proposed method is very effective to implement AR in technological institutes i.e. in college to show campus as well as in teaching and learning activities where virtual objects can make students to learn interactively as they provide the information which we cannot detect with our own senses.*

1. INTRODUCTION:

The modern world is enclosed with gigantic masses of digital visual information. To analyze and organize these devastating ocean of visual information image analysis techniques are major requisite. In particular useful would be methods that could automatically analyze the semantic contents of images or videos. The content of the image determines the significance in most of the potential uses. One important aspect of image content is the objects in the image. So there is a need for object recognition techniques. Object recognition is an important task in image processing and computer vision. It is concerned with determining the identity of an object being observed in an image from a set of known tags. Humans can recognize any object in the real world easily without any efforts; on contrary machines by itself cannot recognize objects. Algorithmic descriptions of recognition task are implemented on machines; which is an intricate task. Thus object recognition techniques need to be developed which are less complex and efficient. Many successful approaches that address the problem of general object detection use a

representation of the image objects by a collection of local descriptors of the image content. Global features provide better recognition. Color and shape features can also be used. Various object recognition techniques are presented in this paper. Difficulties may arise during the process of object recognition; a range of such difficulties are discussed in this paper. The robust and efficient object recognition technique can be developed by taking into account these difficulties and overcoming them.

2. OBJECT DETECTION

Object Detection is to identify objects of interest in the video sequence and to cluster pixels of these objects. Object detection can be done by various techniques such as frame differencing, Optical flow and Background subtraction.

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“LITERATURE REVIEW ON MULTIPLE OBJECT DETECTION AND OBJECT RECOGNITION IN VIDEO”

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ABSTRACT: The modern world is enclosed with gigantic masses of digital visual information. Increase in the images has urged for the development of robust and efficient object recognition techniques. Most work reported in the literature focuses on competent techniques for object recognition and its applications. A single object can be easily detected in an image. Multiple objects in an image can be detected by using different object detectors simultaneously. The paper discusses various techniques for object recognition and a method for multiple object detection in an image.

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3. OBJECT RECOGNISATION:

Object recognition is a process of detecting the object present in an image or a video sequence, with the help of some recognition technique or methods. Object recognition is one of the techniques of digital image processing where we can process any image by applying some of the operation. It actually depends on human perception that what sort of output he needs, based on that, one can apply a particular technique.

4. REVIEW ON OBJECT DETECTION

Object detection is an important and challenging tasks in many computer vision applications such as surveillance, vehicle

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“REVIEW PAPER ON DEVELOPMENT OF SMART STICK FOR BLIND PEOPLE USING GPS & GSM MODULE WITHOUT ANY HUMAN ASSISTANCE”

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ABSTRACT: Mobility of visually impaired people is restricted by their incapability to recognize their surroundings. According to the World Health Organization (WHO) in 2011, over 285 million visually impaired people and 39 million were totally blind out of which 19 million are children (below 15 years). This means that someone in our world goes blind in every five seconds and a child in every minute. In this paper, we present a survey of navigation system of visually impaired people highlighting various technologies with their practical usefulness, design and working challenges and requirements of blind people. We are going to develop an intelligent system that works efficiently in both indoor and outdoor environment. The current device is for the visually impaired focus on travelling from one location to another. Our paper focuses on designing a device for visually impaired people that help them to travelling independently also it must be comfortable to use. The aim of this paper is to provide a better understanding to identify important research directions in this increasingly important social area for future research.

Keywords: Microcontroller, ultrasonic sensor, water sensor, panic switch, GSM and GPS Module.

1. INTRODUCTION

Visually impaired person faces many challenges in independent mobility and navigation. Mobility means the possibility of liberally moving, without support of any supplementary person, at home and unfamiliar scenarios. People with visual impairment tackle enormous limitation in terms of mobility.

They are usually left behind the ignorant crowds of people. They can't do the normal things that an average man does during his daily schedule. They can't climb upstairs, or cross the road or travel the world or anything that usually people do easily. They always search for external assistance for doing these petty things. Hence, there must be some assistive things to be provided to them. The ever increasing number of blind persons attracts the development of many assistive devices around the world. Most of these technologies have limitations as its challenge involves accuracy, usability, interoperability, coverage which is not easy to overcome with current technology for both indoor and outdoor navigation.

So we are designing a new system which is simple, cheap, user friendly, virtual eye is implemented to improve the mobility of both blind and visually impaired people in a specific area. This system include a mini hand stick to help the blind person to navigate alone safely and to avoid any obstacles that may be encountered, whether fixed or mobile, to prevent any possible accident. The main component of this system is the ultrasonic sensor which is used to scan a predetermined area around blind by emitting-reflecting waves.

2. LITERATURE REVIEW

Visually impaired people find difficulties detecting obstacles during travelling independently which makes it dangerous for them. The Smart stick is best solution for blind people to identify the obstacle. Various scientists and researchers have tried to develop various helping system for the blind people. In this section, we have given analysis of various systems that are developed to assist blind peoples.

Power and Area Efficient Design of Reconfigurable Crossbar Switch for BiNoC Router

Mr. Ashish Khodwe, Mrs. V. K. Rajput, Prof. C.N. Bhojar, Prof. Priya M. Nerkar

Abstract—Network-on-Chip (NoC) has been proposed as an attractive alternative to traditional dedicated wire to achieve high performance and modularity. Power and Area efficiency is the most important concern in NoC design. Small optimizations in NoC router architecture can show a significant improvement in the overall performance of NoC based systems. Power consumption, area overhead and the entire NoC performance is influenced by the router crossbar switch. This paper presents implementation of 10x10 reconfigurable crossbar switch (RCS) architecture for Dynamic Self-Reconfigurable BiNoC Architecture for Network On Chip. Its main purpose is to increase the performance, flexibility. We implemented a parameterized register transfer level design of reconfigurable crossbar switch (RCS) architecture. The design is parameterized on (i) size of packets, (ii) length and width of physical links, (iii) number, and depth of arbiters, and (iv) switching technique. The paper discusses in detail the architecture and characterization of the various reconfigurable crossbar switch (RCS) architecture components. The characterized values were integrated into the VHDL based RTL design to build the cycle accurate performance model. In this paper we show the result of simple 4 x4 as well as 10x10 crossbar switch. The results include VHDL simulation of RCS on ModelSim tool for 4 x4 crossbar switch and Xilinx ISE 13.1 software tool for 10x10 crossbar switch.

Index Terms— Interconnection networks, on-chip communication, Reconfigurable, crossbar switch, networks-on-chip (NoCs)

1. INTRODUCTION

Modern Systems contain multiple processors, dedicated hardware processing units and peripherals. As technology advances with ever increasing processor speed, global wires spanning across significant portion of board size will dominate the propagation delay [1], which becomes a performance bottleneck for systems design. In recent years, significant research has demonstrated that an on-chip packet interconnection network is a better candidate for handling on chip communication [2]. System modules communicate to one another by sending packets across the network. This approach has the advantages of both performance and modularity. In another example [3], researchers implemented such a reconfigurable interconnection network on FPGA for improved hardware-software multitasking. The system level components include, besides the on-chip network, also embedded software. Some communication networks that target general-purpose multi processors are the J-Machine [4] and Smart Memory [5]. However, very little research has been done on modeling the on-chip communication architecture and integrating the communication network with processor units in a single environment. As the industry builds multi-core architecture involving

tens and hundreds of cores in the future, on-chip interconnection networks have emerged as a promising candidate for solving the wire-delay problem facing current chip multiprocessors (CMPs) [6], [2]. However, one of the major research challenges currently faced by on-chip interconnection network designers is that of power dissipation [12]. NoC architectures are characterized by the links for data transmission and the routers for storing, arbitration and switching functions performed by input buffers, arbiters and the crossbar respectively. Power is dissipated both for communicating data across links as well as for switching and storage within the routers [12]. With the increasing need for low power architectures, NoC research has focused on optimizing buffer design [9], [10], [11], minimizing crossbar power [8], [12], and utilizing 3D interconnects [13]. Modular router design ensures that the network bandwidth and storage is shared evenly among all the input channels and packets. This effective sharing of resources (buffer and channel) is achieved by implementing routing, crossbar switch and switch allocation functionalities within the router on a hop-by-hop basis. Additionally, broadcasting of communication information across every node adds power (0.6 mW/TX and 0.4 mW/RX). Reducing the size of the input router crossbar switch is a natural approach to reduce the power to read/write a flit and area overhead of the router. However, the network performance and flow control is primarily characterized by the input buffers [15]. However, at high loads, blocking probability increases due to wire-to-wire transfers. Therefore, we design a larger crossbar 10×10 to provide bypass path at all loads. Although a larger crossbar occupies more area, recent work on high-radix routers show that these designs are feasible for on-chip networks [16]. Moreover, double-

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CLOUD SEEDING TECHNOLOGY

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Abstract

Water is one of the most basic commodities on earth sustaining human life. A modeling method for evaluating rain enhancement of cloud seeding with liquid carbon dioxide coolant and silver iodide (AgI) ice nuclei has been developed. The method has been used to stimulate a field experiment. Modeling results indicate that cloud seeding with carbon dioxide coolant and silver iodide in appropriate part of can induce notable change to cloud micro physical and dynamical processes, accelerating updraft velocity, seeding up formation of rain water. The mechanism of seeding to increase rainfall is analyzed this has prompted scientist and engineers to explore the possibility of augmenting water supplies by means of cloud seeding. This warm could seeding technique would enhance cloud albedo.

Keywords: rain enhancement, cloud seeding, liquid carbon dioxide

1. INTRODUCTION

For sometime glycogenic cloud seeding had been proposed as an efficient technique for inducing artificial rainfall in super cooled clouds. The results of many such experiments have been varied, however. Enhancement of existing clouds accompanied by increases in precipitation has been reported in several case studies whereas others have reported decreased or no precipitation due to an increased number of ice particles (eg. Hobbs and polyovich 1980). In addition, randomized experiments have been carried out with inconclusive results. Thus many researchers have some doubts to the efficiency of cloud seeding or artificial rainfall.

The above mentioned studies that focused on demonstrating the efficiency of artificial cloud seeding have involved statistical and physical analysis on an observational basis. One statistical method is to compare the results obtained in randomized experiments from both artificially seeded and unseeded clouds. Over a long period in which large samples sizes can accumulate. Because there are numerous variations (cloud vertical and horizontal scales, cloud life, entrainment, etc) among natural clouds even if the weather conditions are homogeneous in a seeding target region, however, it is difficult to obtain samples with an even distribution of storm intensities, that is, that are lacking bias in storms between seeded and non-seeded days.

2. WHAT IS CLOUD SEEDING?

Cloud seeding is a technique for increasing precipitation

(e.g. Rain or Snow) using naturally occurring clouds. It involves the introduction of additional particles into suitable clouds to encourage the formation and growth of ice crystals or raindrops and thus increase the amount of precipitation that will fall from the cloud. Cloud seeding only occurs when the bureau of meteorology forecasts rain and even then only if conditions are favorable for cloud seeding to be successful. Cloud seeding is only effective if suitable clouds are present. There are regions in west Asia that could potentially benefit from this technology, including the coastal mountains in the eastern Mediterranean, Yemen and Saudi Arabia along the Red Sea and some internal regions. Despite the diversity of opinions on the feasibility of the technology, primarily because of difficulties in assessing its results, the prevailing opinion is that it has reached a relatively advanced stage of application and it can be considered one of the technologies capable of contributing to the augmentation of fresh water supplied in semi arid regions.

2.1 TYPES OF CLOUD SEEDING

There are two main types of cloud seeding

A. Dynamic

B. Static seeding

Dynamic – It is more commonly used for warm latitude clouds that are more capable of releasing the latent heat to add the freezing process of the ice nuclei in clouds.

Static – Involves cumulous clouds travelling west to east through mountain ranges that are picking up water and other microscopic particles like soil, dust, smoke, that

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Investigation on Biogas Generation and Waste Minimization from Cow Dung by Anaerobic Digestion

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Abstract- A three anaerobic digesters having capacity of 20 liters each for different proportions of cow dung and waste water like as 1:1, 1:1.5, and 1:2 respectively utilized for assessment of cow dung in the form of energy and reduction in parameters like as BOD and COD for retention period of 30 days. The proportion (1:1) gives better value in reduction of BOD and COD value and also in production of Biogas in the form of energy. Reduction in BOD and COD value found to be 43.01% and 19.64% respectively also biogas of about 106.89 lit has found to be generated through anaerobic digester.

Index Terms- Anaerobic digester, Biogas, BOD & COD, digested slurry, volumetric method

1. INTRODUCTION

Livestock manure, like cow dung in the absence of appropriate disposal methods can cause adverse environmental and health problems such as pathogen contamination, odour, air born ammonia, green house gases etc [1]. Anaerobic digestion has been considered as waste-to-energy technology, and is widely used in the treatment of organic wastes, for example: organic fraction of municipal solid waste, sewage sludge, food waste, animal manure etc [2]. Recently, large amount of cow dung generated from feedlot farming increases annually, most of which are disposed into landfills or are applied to the land without treatment. Anaerobic digestion provides an alternative option for energy recovery and waste treatment [3]. Biogas production has been attracting increasing attention as a bio-fuel of the future because biogas technology not only constitutes a bio-fuel source, but also can be applied in the various environmental pollutants. In this paper, Cow dung has assessed to study the reduction in parameters of digested slurry as well as energy recovered through anaerobic digester with consideration of three different proportions of cow dung and waste water as 1:1, 1:1.5, and 1:2 for 30 days of retention period. A three anaerobic digester each of 20 liters capacity has considered for every proportion of cow dung slurry. The digestion performance of cow dung has evaluated in the form reduction in BOD and COD value after 30 days of retention time for each proportion. The proportion of 1:1 given better values than other proportions towards reduction in BOD and COD value as 43.01% and 19.64% respectively. Similarly, the cumulative biogas production found to be 106.89 lit. at the end of 30 days of retention period.

2. MATERIALS AND METHODS

2.1. Waste Collection

Fresh cow dung and waste water collected from JAGDAMBHA DAIRY FARM, KINH. The cow dung was diluted in waste water for different proportions as 1:1, 1:1.5, and 1:2.

2.2. Experimental Setup

Three digesters of 20 liters capacity has prepared for every proportion of cow dung slurry. Digester has been prepared with proper arrangement of Inlet, outlet and gas pipe and set up at farm in proper manner and shown in [fig 2.1]. Details of digesters operations are given in [Table 2.1]. Also details of mix masses of charge stock and waste water depicted in [Table 2.2]



Fig. 2.1 Actual Model and Set up of Anaerobic Digester at farm



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PERFORMANCE BASED SEISMIC DESIGN OF RCC BUILDING

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Abstract: Every Civil Engineering structure or building is inimitable in nature unlike other engineering products which are constructed in a massive scale using the same technique repeatedly. The present Project is an attempt to understand Performance Based Design Approach. The performance-based seismic design approach enables us to design new structures more efficiently and to assess existing structures more realistically. The promise of performance-based seismic engineering is to construct structures with expected seismic performance. Performance based seismic design precisely evaluates how building is likely to perform in given possible earthquake threat. In performance based design identifying and assessing performance capacity of structure in an important part of design process, and guide the many decisions that must be made. Present study based on performance based seismic design and non-linear analysis of multi-storey RCC building. Performance based seismic design is an iterative process, begins with choice of performance objective followed by preliminary design, an evaluation whether or not the design meets the performance objective and finally redesign and reassessment, until desired performance level is achieved. In this project work we have carried out performance based seismic design of multi-storey (G+5) RCC building. Once design is complete, non-linear analysis is carried out to study seismic performance of building and found out whether selected objective is satisfied or not. In this work (G+5) RCC building is designed as per IS code (IS 1893 (Part 1): 2002, IS 456: 2000) for zone 5, 4 and 3 for Maximum Considered Earthquake (MCE) and Design based Earthquake (DBE) and a nonlinear static analysis is carried out using auto plastic hinges. After the building is designed it is imported to ETABS platform in order to carry out Pushover Analysis. The Displacement controlled Pushover Analysis was carried out and the Pushover Curve were obtained for the building as per guidelines mentioned in ATC 40. The Capacity Spectrum, Storey Displacement, Storey Drift, Demand Spectrum and Performance point of the building was found using the analysis carried out in ETABS 2015. These results were compared for each zone from which we can find out how the building will perform in different zones. From the Performance point it was found that the Building designed as per Indian standards was found to be well above Life safety performance level considering Designed Based Earthquake.

Keywords: Performance based seismic design, Performance objective, Capacity, Demand.

1. Introduction

The concept of performance based design evolved when designers started realizing that conventional code design method was not always the most appropriate method. Different structures have different performance requirements and it is not appropriate that the same prescriptive criteria be used for designing different structures. According to the code guidelines base shear is calculated on the basis of Importance factor ("I"), Zone factor ("Z") and Average response acceleration coefficient (S_a/g). Calculated base shear is distributed to floor levels which depend on amount of mass present at storey level and its height. After the analysis for lateral forces gives design forces and moments and combined with forces and moments due to dead load and live loads according to load combinations stated in IS 1893(Part 1) : 2002 according to that we stabilize the structure by using IS 456:2000 followed by pushover analysis. Performance based seismic design suggest how a building will perform for given seismic hazard. Performance based design begins with the selection of performance objective then preliminary design and check whether the building meets the performance objective if not than redesign and reassessment if required.

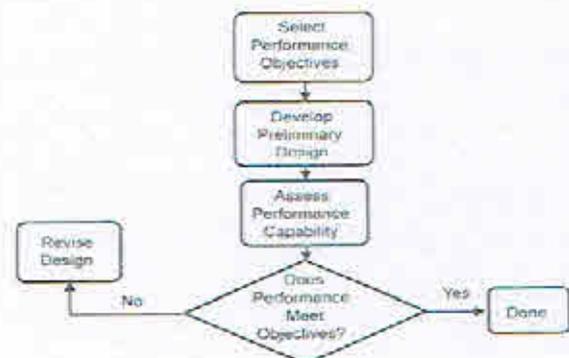


Fig.1 Performance based seismic design

Performance levels: In general, performance requirement can be categorized into four classes as operational (functioning fully after earthquake), immediate occupancy (slightly damaged but any minor repair could be done without disrupting the function of the building), immediate occupancy (slightly damaged but any minor repair could be done without disrupting the function of the building), life

PERFORMANCE BASED SEISMIC DESIGN OF RCC BUILDING

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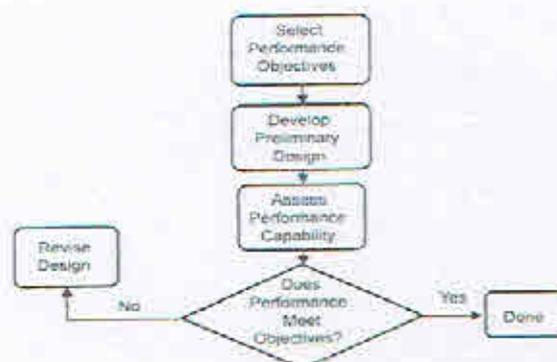
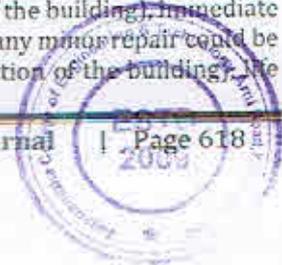


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Comparative Study of RCC And Prestressed Concrete Beams For Various Spans

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Abstract- This paper presents the Comparative Study Of R.C.C. And Prestressed Concrete Beams, which include the design and estimates of R.C.C. and Pre-stressed concrete beams of various spans. The aim of this work is to design large span R.C.C. beam as well as prestressed concrete portal beams variety and then compare the results. The idea is to reach a superior conclusion regarding the superiority of the two techniques over one another. A couple of cases were comprehensively analyses by ETABS 2015 software and designed manually of both the R.C.C. and Prestressed concrete beams. Based on the manual design procedure, a computer program in MS EXCEL was developed for designing both R.C.C. and prestressed concrete portal beam. A separate program was developed for estimating. A number of cases were studied from 10m, 12m, 15m and 18m span. In India R.C.C structures are commonly used for residential as well as commercial buildings or we can say for short span buildings. In R.C.C beams depth of beam increases with increase with span because of deflection limitation. To surmise, R.C.C beams shall be the suitable for small to medium span but the superiority of prestressed concrete beam undisputable for longer spans.

Keywords- Beams, R.C.C, Prestressed concrete, ETABS, MS EXCEL.

I. INTRODUCTION

A. Importance & Necessity:

Concrete frame structures are a very common or perhaps the most common type of modern building internationally. As the name suggests, this type of building consist of a frame or skeleton of concrete. Horizontal members of this frame are called beams, and vertical members are called columns. A human walks on flat planes of concrete called slab. To construct a frame we used Reinforced Cement Concrete commonly called as RCC, this is one of the construction technique that made construction very easy and brought a boom to field of construction. In RCC structure cement concrete can take up immense compression but weak in tension whereas steel is good in withstanding both tension and compression. No doubt, RCC framed structure is very easy to construct when the span ranging from 3 m to 7.5 m but

it is not suitable when the span is large and it becomes very cumbersome for large span as the span increased the cross sectional dimension of member is also increases and it directly increases the self-weight of the member.

Prestressed concrete is the most recent major form of construction introduced in the structural engineering because it has its own advantage like, the size or dimension of structural members are reduced, which may increase the clearances or reduce storey heights. It also permits the use of large spans (greater than 30 m) with shallow members, even when heavy load are encountered. The prestressing technique has eliminated the weakness of concrete in tension and hence crack free members of structure are obtained.

High strength concrete is necessary in prestressed concrete, as the material offers high resistance in tension, shear, bond and bearing. In the zone of anchorages, the bearing stresses being higher, high strength concrete is invariably preferred to minimize costs. High strength concrete is less liable to shrinkage cracks, and has a higher modulus of elasticity and smaller ultimate creep strain, resulting in smaller loss of prestress in steel. The use of high strength concrete results in a reduction in the cross sectional dimensions of prestressed concrete structural elements. With a reduced deadweight of the material, longer span become technically and economically practicable. As we considered the high rise structure which is in the case of large floor and roof covering using prestressed concrete as material, there are several types of structural forms for adoption. The aim of this work is to design a frame of RCC as well as prestressed concrete variety for various spans and then compare the results. This idea is to reach a definite conclusion regarding the superiority of the two techniques over each other.

B. Scope :

This work include the design and estimate for beams of various spans, ranging from 10 m, 12 m, 15 m, 18 m by R.C.C and Prestressed concrete techniques. For smaller spans, associated with normal building works, prestressed concrete construction become too cumbersome, irrespective of the economics involved. Post-tensioning is preferred as it is popular in construction for large span slabs.



INTERNATIONAL JOURNAL FOR ENGINEERING APPLICATIONS AND TECHNOLOGY

CRITICAL STUDY OF SEISMIC ANALYSIS OF MULTISTOREY BUILDING WITH AND WITHOUT FLOATING COLUMN

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Abstract

This paper presents critical study of seismic analysis of multistory building with floating and without floating columns. This work includes the analysis and design of the floating column and non-floating column structures by using software ETABS-2015. The best way is to select the type of construction, depending on the circumstances and type of structure. Load transfer path has a great importance in case of structural stability in very major earthquake. There are numerous observations of damages caused by irregularity in buildings such as vertical irregularity is predominant to structure while earthquake excitation, the earthquake forces developed at different floor levels in building need to be brought down along the height to the ground by the shortest path, any deviation or discontinuity such as floating columns results in poor performance of building. The aim of this work is to compare the response of RC frame buildings with and without floating columns under earthquake loading and under normal loading. The idea is to reach a definite conclusion regarding the superiority of the two structures over one another. Finally, analysis results in the building such as storey drifts, storey displacement

Keywords: dynamic analysis, floating column, ETABS, response spectrum method

INTRODUCTION:

The term floating column is also a vertical member which at its lower level rests on a beam which is a horizontal member. The beams in turn transfer the load to other columns below it. The building can be categorized into two type, regular building and irregular building. Building containing floating column comes into irregular type of building. This type of building is mainly known as irregular building. So building with floating column, there will be discontinuity in load transfer path. The forces which are generated will be transferred to the ground through the shortest possible path. In order to convert it into a building with floating column, some of the columns at storey one is removed and two cases are considered. These buildings were analysed for two different zones i.e. zone III

FLOATING COLUMN

The floating column is a vertical member which rest on a beam and doesn't have a foundation. The floating column act as a point load on the beam and this beam transfers the load to the columns below it.

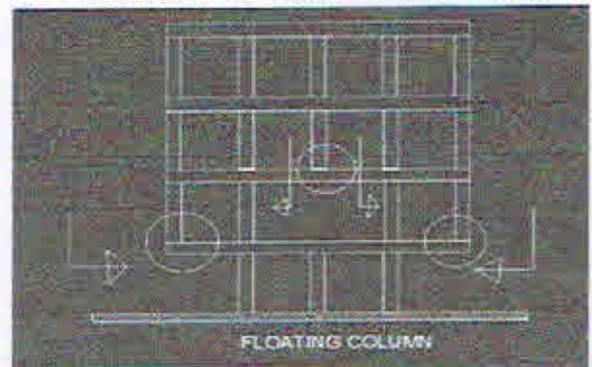


Figure 1 Floating column in building.

The main objectives of the proposed work are: 1. To compare the modal response of all the models (Mode shapes, Time period, Frequency). 2. To compare the Base shear, Storey drift, Storey displacement and maximum displacement of each storey

MODELLING DETAILS:

In present study, seven storey normal building is considered and in normal building columns of storey one





REVIEW ON SELF CURING CONCRETE USING POLY-ETHYLENE GLYCOL (PEG-400) IN CEMENT CONCRETE

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Abstract

As we know that water is becoming a scarce material, there is an urgent need to do research work to saving of water in making concrete and in constructions. As some areas has a scarcity of work for construction work. Curing of concrete is maintaining satisfactory moisture content in concrete during its early stages in order to develop the desired properties. Curing of concrete plays a vital role in developing the construction and hence improves its durability and performance. Curing is the process of maintaining the proper moisture content to promote optimum cement hydration immediately after placement. The main objective of this experimental investigation is to find out behavior of self-curing concrete. The experiments are designed by adding an admixture (POLYETHYLENE GLYCOL-400) at different percentages such as 0%, 0.5%, 1%, 1.5%, 2% of cement content. The specimens are cured without water for 28 days and later different strength characteristics such as compressive strength, tensile strength are studied.

Index Terms: self-curing concrete; self-curing agent; PEG-400.

1. INTRODUCTION

Concrete is the basic engineering material used in most of the civil engineering structures. Its popularity as basic building material in construction is because of its economy of use, good durability and ease with which it can be manufactured at site. Concrete like other engineering materials needs to be designed for properties like strength, durability, workability. With advent of new generation admixtures, it is possible to achieve higher grades of concrete with high workability levels economically. Curing is the maintaining of a satisfactory moisture content and temperature in concrete during its early stages so that desired properties (of concrete) may develop.

As we know that the concrete gains the strength only in presence of water and this water is provided after placing the concrete in formwork with the help of appropriate curing method. In places where scarcity of water is there and availability of water is less for the construction activity purpose some chemical admixture is use for effective curing. Many researcher has invented the

effectiveness of Poly-ethylene Glycol as a self-curing agent.

In this work we are going to study the effect of polyethylene glycol on cement concrete and to estimate the optimum dose of Polyethylene glycol in concrete.

Polyethylene-Glycol (PEG): Polyethylene glycol is produced by the interaction of ethylene oxide with water, ethylene glycol, or ethylene glycol oligomers. The reaction is catalyzed by acidic or basic catalysts. It is used as water reducing agent.

1.1 Need and scope of study

Curing of concrete is maintaining satisfactory moisture content in concrete during its early stages in order to develop the desired properties. However good curing is not always practical in many cases. The aim of this investigation is to evaluate the use of water-soluble polymeric glycol as self-curing agents. The use of self-curing admixture curing admixtures is very important from the point of view that the water resources are getting valuable every day. The benefit of self-curing admixtures is more significant in desert areas where water is not adequately available. In this study the

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EXPERIMENTAL STUDY ON UTILIZATION OF E -WASTE IN CEMENT CONCRETE

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Abstract

At present demand of infrastructure is increasing day by day. The basic fundamental component for construction of any infrastructure is concrete. Due to large use of concrete as the basic construction material availability of raw materials is being questioned. The ratio of demand vs. Supply of material is increasing rapidly. Thus to overcome the demand of natural materials such as aggregate and cement, it is necessary to find alternatives of these materials. On the other hand electronic waste (e-waste) generation is also an emerging issue posing serious problems to the environment. Generation of e-waste is a very serious issue in the world. In year 2014 produce near about 650000 MT of e-waste in India that includes all electronic wastes and electrical wastes (TVs, computers, sound system etc). For solving the disposal of large amount of e-waste material, partial use of e-waste in concrete industry is considered as the most feasible application. The e-waste like non-metallic parts of PCB plates can be recovered and can be use as an ingredient in concrete. So we can use this e-waste to achieve desire concrete in terms of their properties. In this paper the coarse aggregate is replaced by e-waste and the research strongly shows possibility of e-waste being used as substitute of fine and coarse aggregate. More use of this waste material tends to reduce the demand of natural resources used in concrete and it is of prime importance that substitute of coarse aggregate can be explored.

Index Terms: e-waste, workability, compressive strength, split tensile strength.

1. INTRODUCTION

We cannot imagine civil engineering structures without concrete. Concrete is a backbone of infrastructural development and hence manufactured in large quantity. At the other hand large amount of e-waste is generated every year and out of which a very small percentage e-waste is treated by either recycling it or reusing it. From the study it is found that only 12.5% of e-waste is recycled. E-waste like non-metal parts in PCB's (printed circuit boards) can be recovered & used as an ingredient in concrete. So, partial replacement of aggregate by e-waste has been experimentally carried out in various part of the world. With the use of e-waste we can overcome many environmental problems as it reduces the landfill due to e-waste and reduced the use of natural resources like aggregates. In this paper comparative study is made by replacing the coarse aggregate by e-waste in different percentages and to find the behaviour of concrete with these replacements and to find the optimum percentage replacement.

2. LITERATURE REVIEW

Many researchers gave some conclusion on effect of use of e-waste on the physical properties of concrete. Out of which some researches I would like to include in this paper.

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INTERNATIONAL JOURNAL FOR ENGINEERING APPLICATIONS AND TECHNOLOGY

EXPERIMENTAL STUDY ON UTILIZATION OF E -WASTE IN CEMENT CONCRETE

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Abstract

At present demand of infrastructure is increasing day by day. The basic fundamental component for construction of any infrastructure is concrete. Due to large use of concrete as the basic construction material availability of raw materials is being questioned. The ratio of demand vs. Supply of material is increasing rapidly. Thus to overcome the demand of natural materials such as aggregate and cement, it is necessary to find alternatives of these materials. On the other hand electronic waste (e-waste) generation is also an emerging issue posing serious problems to the environment. Generation of e-waste is a very serious issue in the world. In year 2014 produce near about 650000 MT of e-waste in India that includes all electronic wastes and electrical wastes (TVs, computers, sound system etc). For solving the disposal of large amount of e-waste material, partial use of e-waste in concrete industry is considered as the most feasible application. The e-waste like non-metallic parts of PCB plates can be recovered and can be use as an ingredient in concrete. So we can use this e-waste to achieve desire concrete in terms of their properties. In this paper the coarse aggregate is replaced by e-waste and the research strongly shows possibility of e-waste being used as substitute of fine and coarse aggregate. More use of this waste material tends to reduce the demand of natural resources used in concrete and it is of prime importance that substitute of coarse aggregate can be explored.

Index Terms: e-waste, workability, compressive strength, split tensile strength.

1. INTRODUCTION

We cannot imagine civil engineering structures without concrete. Concrete is a backbone of infrastructural development and hence manufactured in large quantity. At the other hand large amount of e-waste is generated every year and out of which a very small percentage e-waste is treated by either recycling it or reusing it. From the study it is found that only 12.5% of e-waste is recycled. E-waste like non-metal parts in PCB's (printed circuit boards) can be recovered & used as an ingredient in concrete. So, partial replacement of aggregate by e-waste has been experimentally carried out in various part of the world. With the use of e-waste we can overcome many environmental problems as it reduces the landfill due to e-waste and reduced the use of natural resources like aggregates. In this paper comparative study is made by replacing the coarse aggregate by e-waste in different percentages and to find the behaviour of concrete with these replacements and to find the optimum percentage replacement.

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1. INTRODUCTION

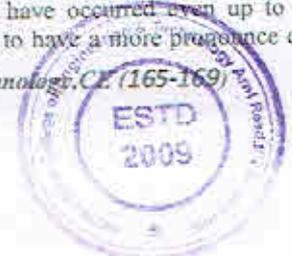
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USE OF INDUSTRIAL WASTE IN FLEXIBLE PAVEMENT CONSTRUCTION

Anurag K. Gahalod¹, Pragya M. Lunawat², Gaurav P. Maske³¹Asst. Prof., Civil Engg., J.C.O.E.T., Yavatmal, anu.gahalod@rediffmail.com²B.E. Final year, Civil Engg., J.C.O.E.T., Yavatmal, pragyajain988@gmail.com³B.E. Final year, Civil Engg., J.C.O.E.T., Yavatmal, gauravmaske1@gmail.com**Abstract**

In present era, safe disposal of Industrial wastes is a great problem. These waste materials create environmental pollution because many of them are non-biodegradable. India has large network of industrial which are located in different parts of the country and many more are to come in the near future. Million metric tons of industrial wastes are produced in this industries. The pollution and disposal problems are minimized by utilizing these materials in highway construction. It is essential to test these materials and to find a new methodology and specification to increase the use of these industrial waste in road construction in India. A review of various Industrial wastes to be used in the construction of highway has been discussed in this paper. The common waste materials are used are construction and demolition waste and tiles waste causing problems in the disposal.

Keywords: C & D (Construction and Demolition) waste, Tiles waste, Ceramic waste, Industrial waste.

INTRODUCTION

We know that the India is developing country which means that industrialization is growing day by day. Disposal issue of the waste products is a challenge now a day. Some of these waste materials are not biodegradable and often leads to waste disposal crisis and environmental pollution. Due to increasing in waste volume and a shortage of landfill, waste management is becoming a more significant and important subject. The use of these materials in road making is based on technical, economic, and ecological criteria. India has vast network of industries located in different parts of country. Traditional soil, stone aggregate sand, bitumen, cement etc. are used for road construction. Natural materials being exhaustible in nature, its quantity is declining gradually. Also, cost of extracting good quality of natural material is increasing.

If this materials can be suitably utilized in highway construction, the disposal problem of the waste may be get reduced it will also help to reduce pollution. Keeping in mind the need for bulk use of these solid wastes in India, it was thought expedient to test these materials and to developed specifications to enhance the use of these industrial wastes in road making, in which higher economic returns may be possible.

MATERIAL EMPLOYED

Since construction and demolition waste are producing on large scale and ceramic (Tiles) wastes are also generating on large scale. Management of these waste is big problem that world is facing now. Here is the best way to manage these utilizing it in road construction. Hence we are using these two materials.

1. Sampling:-

Sampling is the process of collection of materials from their resources. Sampling of C and D waste and Tiles waste can be done as follows.

C and D - due to urbanization of construction domain is increasing drastically along with that environmental issue like landfill due to illegal dumping etc are also increasing and every man made structure has a certain year of life span. Due to demolition construction waste is produce and due to less land availability disposing is a problem. So C and D waste is collected from the site where the demolition process is going.



Fig.-1: Various sources of Construction and Demolition waste

Tiles waste:- Tiles are produced in ceramic industry by metallurgical process. Tiles is composed of various materials and some of them are chemically hazardous which may cause a problem to environment if are not properly manage.

2. Grading of material:-

C and D waste and Tiles waste collected from resources are of irregular grading. It is obvious things that they are waste material so they don't have required shape and size. The aggregate which are used in road construction are consisting of a standard grading. This grading of aggregate is specified by various agencies like ASTM, BSI, IS, IRC and MORTH.



INTERNATIONAL JOURNAL FOR ENGINEERING APPLICATIONS AND TECHNOLOGY

STABILIZATION OF BLACK COTTON SOIL BY USING WASTE FIBRE AND LIME

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Abstract

Soil stabilization has been introduced into the field geotechnical engineering for many years in order to improve the property of ground soil in specific it is the one of the most popular techniques used for the improvement of poor soil. Further, soil stabilization causes significant improvement in shear strength, bearing capacity, as well as economy. The main objective of this study is to investigate the use of waste fibre materials and lime in geotechnical applications and to evaluate the effect of waste polypropylene fibre and lime on shear strength of unsaturated soil by carrying out direct shear test and unconfined compression tests on two different soil sample the result obtained are compared for the two sample and inferences are drawn towards the usability and effectiveness of fibre reinforcement and lime as a replacement for deep foundation or raft foundation, as cost effective approach.

Keywords:-Waste fibre material, California Bearing ratio (CBR), unconfined compressive strength(UCS)

INTRODUCTION

For any land-based structure, the foundation is very important and has to be strong to support the entire structure. In order for the foundation to be strong, the soil around it plays a very critical role. So, to work with soil, we need to have proper knowledge about their properties and factor which affect their behaviour work. The process of soil stabilization helps to achieve the required properties in soil needed for the construction work.

Keeping in mind the large geographical area of India (3,287,240 sq.km) and population of India (125 million approximate) the vast network of structure and roads are required. The land available for construction is very less because of increasing urbanization and modernization. Everywhere land is being utilize for various structure from an ordinary house to sky scrapers, from bridges to airport and from village road to highway or expressway. Soil being cheapest and readily available construction material, has been popular with the Civil Engineers, even though it being poor properties.

From the beginning of construction work, the necessity of enhancing soil properties has come to light. Ancient civilization of the Chinese, Romans and Incas utilized various method to improve soil strength etc., some thus method so effective that their building and road still exist.

In India, the modern era of soil stabilization began in early 1970's, with a general shortage of petroleum and aggregates, becomes necessary for the engineers to look

at means to improve soil other than replacing the poor soil at the building site. Soil stabilization was use but due to the use of obsolete methods and also due to absence of proper technique, Soil Stabilization lost favour. In recent time, with the increase in demand for infrastructure, raw materials and fuel, Soil Stabilization has started to take a new shape. With the availability of better research, materials and equipment, it is emerging as a popular and cost-effective method for Soil improvement.

Here, in this project, Soil Stabilization has been done with the help of randomly distributed fibres obtained from waste materials. The improvement in the shear strength parameters has been stressed upon and comparative studies have been carried out using different method of shear resistance measurement.

For all the above reason, expansive are generally poor materials for construction so to improve the soil properties stabilization or reinforcement of soil is done. Soil reinforcement is defined as a technique to improve the engineering characteristics of soils. In this way, using natural fibres to reinforced soil is an old an ancient idea.

OBJECTIVE

1. The prime objective of soil stabilization is to be improving the California bearing ratio of in-situ soil by 4 to 6 times. The other prime objective of soil stabilization is to improve on site materials to create solid and strong sub base and base course. In certain regions of the world, typically developing countries

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UTILIZATION OF PHASE CHANGE MATERIAL IN BUILDING CONSTRUCTION

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Abstract

One of the important issues today's scientific worlds is in the topic of sustainable development and sustainable architecture which is followed. The building sector accounts more thermal energy. It is necessary to reduce the amount of energy in buildings which causes toward sustainable development which consistent with the needs of today's generation which put future generation. This paper gives the review over the such kinds of materials from which thermal energy stored such materials now a days recognized as a PHASE CHANGE MATERIALS. PCM plays an important role as a thermal energy storage device by utilizing its high storage density and also latent heat property. One of the potential applications for Phase change material is in buildings by incorporating in the building envelope for energy conservation. During the summer season, the advantages are a decrease in overall energy consumption by the air conditioning unit and a time shift in peak load during the day. The integration of a Phase change material layer into an external building wall diminished the amplitude of the instantaneous heat flux through the wall. The effects of a layer of PCM mounted on the internal vertical and horizontal opaque walls are investigate. So in these paper three-dimensional transient heat transfer model has been developed and solved numerically using the commercial Thermal analysis package.

Keywords: phase change material, wallboard, energy storage, experimental investigation, temperature fluctuation.

1. INTRODUCTION

Energy storage is a key issue to be addressed to allow intermittent energy sources, typically renewable sources, to match energy supply with demand. Latent heat is the amount of heat released or stored by a substance during a change of state that occurs without much change in temperature. Latent heat storage can occur as solid-liquid phase change, liquid-vapor phase change, and solid-solid phase change. For solid-liquid phase change material, the latent heat stored is equal to the enthalpy difference between the solid and the liquid phase. There are numerous storage technologies that are capable of storing energy in various forms including kinetic energy, chemical solutions, magnetic fields, or other novel approaches. Phase-change material (PCM) is a substance with a high heat of fusion which, on melting and solidifying at a certain temperature, is capable of storing and releasing large amounts of energy. PCMs are regarded as a possible solution for reducing the energy consumption of buildings. For raising the building inertia and stabilizing the indoor climate, PCMs are more useful because of its nature of storing and releasing heat within a certain temperature range. Experimental work was carried out by Arizona Public Service (APS) in collaboration with Phase Change Energy Solutions (PCES) Inc. with a new class of organic-based PCM. PCM has non-flammable

properties and can be safely used in buildings. The experimental setup showed maximum energy savings of about 30%, a maximum peak load shift of ~ 60 min, and maximum cost savings of about 30%.

2. METHOD AND MATERIAL

CLASSIFICATION OF PHASE CHANGE MATERIALS.

PCM are classified in two types are: these are Organic PCMs e.g. Paraffin Wax and Inorganic PCMs.

It is the efforts in the development of latent TES materials used in inorganic PCMs. So in these materials are salt hydrates, including Glauber's salt (sodium sulphate decahydrate), which was studied extensively in the early stages of research into Phase change materials.

The phase change properties of inorganic PCMs are below the table and the most promising selection of organic PCMs



Modelling and Simulation of Torque Hysteresis Controller for Brushless D.C Motor Drive

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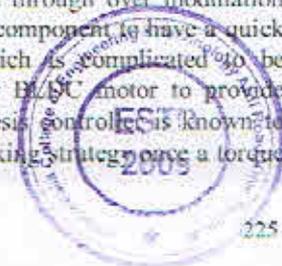
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ABSTRACT: Modelling and simulation of a torque hysteresis controller for brushless DC motors. Brushless DC (BLDC) motors can offer great advantageous compared to other machines used in industrial applications due to its compactness, high torque density, simpler controller and lower maintenance. At first the mathematical modelling of BLDC motor that is suitable to analyse the dynamic performance will be given. A method of torque hysteresis controller will be adapted to drive the motor such that the current (or torque) ripple can be restricted within the predefined band-gap. Moreover, a new current blocking strategy is proposed to prevent the current drained from DC supply when the torque demand is set to zero, that can prolong the capacity voltage of batteries. Some simulation results were carried out using MATLAB/ Simulink to verify the proper modelling as well as functionality of the controller.

KEYWORDS: component; brushless DC motor; hall effect; simulation, torque hysteresis controller.

I. INTRODUCTION

Several years ago, brushes DC motors were regularly used in many applications since it has a simple construction, easy to control and can give superior dynamic performance. However, this type of the motor that equipped with commutator and brush requires frequently maintenance, cannot be performed at dirty or explosive environment and at very high speed operations. Due to these reasons, many types of motors were developed to minimize or solve the problems such as induction motor, switched reluctance motor and permanent magnet synchronous motor. Among these types of motors, the use of permanent magnet synchronous machine (PMSM) has recently received much attention, particularly for electric vehicle applications. This mainly due to the fact that the PMSM offers higher efficiency and torque density (i.e. Nm/kg). In general, the PMSM can be classified into two types depending on back-emf wave shape production, i.e. sinusoidal and trapezoidal wave shapes. The one that is operated in sinusoidal is normally referred to as permanent magnet AC motor or brushless AC motor. The latter one that produces trapezoidal back-emf wave shape is normally called as brushless DC motor (BLDC). It can be shown that the production of torque in BLDC is quite similar to that of brushes DC motor with simple control algorithm and comparable performance. In many electrical drive applications, it is desirable to achieve fast torque dynamic response as produced in brushes DC motor, whereby the torque can be directly controlled by regulating the armature current. Several papers were reported to achieve this requirement, for examples : fully utilized the available DC link voltage through over modulation strategy and generated the maximum possible voltage vector that is tangential to the flux component to have a quick change of torque dynamic. Ultimately, all these methods used a vector control which is complicated to be implemented. This paper will discuss the principle of torque hysteresis controller for BLDC motor to provide naturally current protection, reliable and fast torque dynamic control. In fact the hysteresis controller is known to provide high control bandwidth and robust control. It will also present a new current blocking strategy once a torque



“POWER QUALITY IMPROVEMENT BY USING UPQC IN GRID CONNECTED SOLAR PV
PANEL & DFIG WIND FARM”

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ABSTRACT: In this paper we introduce a UPQC in a grid connected DFIG wind farm distribution system improving the power quality on the source and load side. The UPQC is further developed with integration of a solar panel (PVA- Photo Voltaic Array) of specific capacity in parallel with DC link capacitor. The PVA injects power into the series and shunt converters which helps the distribution system to maintain the voltage at 1 pu and current of the source with lower harmonic distortion. Results of the test system without UPQC, with UPQC and UPQC with PVA are compared by applying FFT (Fast Fourier Transformation) analysis to depict the THD of the source voltage, source current and load voltage. Effect of UPQC with PVA on DFIG wind farm is also observed with comparative analysis and study. The complete design and analysis is modeled in MATLAB software with self explanatory graphical representations. A tabular comparison of the THD values will be shown as a final result and performance of the system is determined.

Keywords: Wind Energy, Power Quality, UPQC,DFIG.

1. INTRODUCTION

Now-a-days, our technological world has become completely dependent upon the continues availability of electrical power. In most of the countries, the electrical power is provided via nationwide grids interconnecting various generating stations to the loads. The grid must supply the basic power demands of residential, industrial, commercial, medical organizations etc.[8] But Electrical power generation systems are facing major problems like deficiency of fossil fuel, the need to reduce emissions and power losses in Long transmission lines. And to reduce these losses nonconventional energy generating systems used into the grid by means of Distributed Generation (DG) networks. In the power transmission system some power quality issues are raised, with the integration of nonconventional energy systems into grid. With the help of power electronic converters. Almost all nonconventional energy systems are integrated into grid takes place.[9] PV and wind energy systems are most widely used with power grid, their integration with the grid also increases. Also the integration of large wind farms to power grid yield power quality (PQ) problems such as voltage sag, swell, harmonics flicker, etc. The outcome of PQ problems are data error, equipment failure. Most industrial and commercial load are nonlinear and they produces the harmonics. For the reduction of both voltage sag and current harmonics, custom power technology uses. For reducing voltage related problems Dynamic Voltage Restorer (DVR) is well suited to protect sensitive load from short duration voltage swell. But DVR doesn't take care of load current harmonics, so the device STATCOM is widely used for the prevention of load current harmonics in addition to the addition of reactive power control, but it doesn't take care of voltage related problems. UPQC is only device easily used for the mitigation of both voltage sag and load current harmonics. the selection of suitable controller plays a main role to improve the performance of UPQC. [1]

2. UNIFIED POWER QUALITY CONDITIONER

The Unified Power Quality Conditioner (UPQC) one of the best solutions to solve problems related to both current and voltage in power system.

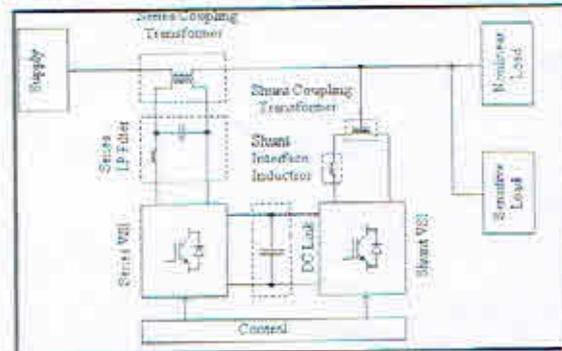


Figure 1: Unified power quality conditioner (UPQC) system configuration

Now a day, with the advancement in complex electronics industries, there are lots of problems associated with the power system and it has become necessary to provide a dynamic solution with high degree of accuracy and fast speed of response in order to mitigate and deals with these kind of issues. Recently, The UPQC which is integration of shunt and series APF is one of the most suitable as well as effective device in this concern. A comprehensive review on the UPQC to enhance the electric power quality at distribution and transmission levels for various type of power generation system has been reported in. The main purpose of UPQC is to solve the problems coming from both source side and load side, such as voltage sag, voltage swell, distortion in the supply voltage, harmonic currents, reactive currents etc. Consists of two series and shunt inverter connected back to

Design of Automatic Solar Based Grass Cutter by Using Android Application

35

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Abstract— The present technology commonly used manually operated device to cut the grass, which creates pollution and loss of energy. In this project we introduce the automatic grass cutter for cutting grass. Automatic grass cutter will reduce the effort required for cutting grass in the law. Also solar power will be used to provide the driving force for the cutter, sensors and crane mechanism will be used to detect and avoid the unnecessary object in the field during the operation. It consist of microcontroller, grass collector, obstacle lifting crane, solar panel and android application, adjustable level of grass cutter and gear wire blade. Also, the design parameters are discussed in this paper.

Keywords— cutter; sensors; microcontroller; android application.

I. INTRODUCTION

The first grass cutter was invented in 1830 by Edwin Beard Budding. He was said to obtain the idea after watching a machine in a local mill, which used a cutting cylinder mounted on a bench to cut the extra material for a sooth finisher after weaving. Budding realized that a similar concept could be used to cut the grass if the machine is mounted on a wheel. Farm to enable the blades rotate closer to the surface. In 1832, Ransoms of Ipswich (under license) began the making of Budding mover. this company is today the world's manufacture of grass cutter care equipment. By mid-1850, Thomas Green developed a cutter which used chains to transmit power from rear roller to the cutting cylinder. It was called 'SilensMessor' means silent cutter. The machine were found comparatively lighter and quieter than the gear driven machines that produced them.

Today, the recent innovation is the rotary hover mower. There are primarily to type of mowers namely the reel mowers, and the rotary movers. Made of blade on revolving cylinder, they achieve clean cut by scissors action. As the movers move forward, the rotating blades come in contact with a

stationary bar called the bed and place parallel to the ground. Grass is held by the shearing action of the blades against the bed knife. The over is adjust at various cutting heights. Rotary mowers are often powered either by an internal combustion engine or electric motor are generally moved manually, with the engine only spinning the cutting blades. The most common type are fitted with wheels, but a never innovation is the hover model in which the spinning blade also acts as a fan that provides a lift force, lifting the over body clear of the ground on the same principle with hover craft [1]. This device is present for the grass cutting, but major drawbacks are sound pollution, air pollution is the major issue in the universe. Pollution is manmade and can be seen own house, lawn, farm etc. In case of diesel powered grass cutter due to the emission of gases it is responsible for air pollution. Also the cost of the fuel is increasing hence it is not efficient. In diesel powered grass cutter labor cost is to high as well as maintenance cost also high[2]. So as to overcome this problem we are try to include such a device in our machine, which is capable to cut the grass in lawn, playing ground and farm etc with better efficiency. Machine perform totally automatic operation toward recognition of obstacle. Solar panel is mounted on top of the machine so as to get maximum solar radiation for providing the solar energy to battery. Battery is also mounted on top of the machine and below the solar panel to store the power efficiently. Widely available energy is solar energy which is renewable energy, by using solar panel we can store the charges in battery. The main part of the grass cutter machine are dc motor, microcontroller, wheel, battery, solar panel, sensor. PPMC Motor consisting maximum torque which is used for driving the wheel of motor at a desire speed, and PPMC DC Motor used for the cutter which have speed of 12000 rpm with maximum torque connected with gear wire cutter motor cut the grass at excellent speed, another

A Game Theoretical Approach for Intrusion Detection Technique in Mobile Ad Hoc Networks

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Abstract: Mobile Ad hoc Networks (MANET) are self-configuring, infrastructureless, dynamic wireless networks in which the nodes are resource constrained. Intrusion Detection Systems (IDS) are used in MANETs to monitor activities so as to detect any intrusion in the otherwise vulnerable network. In this paper, we present efficient schemes for analyzing and optimizing the time duration for which the intrusion detection systems need to remain active in a mobile ad hoc network. A probabilistic model is proposed that makes use of cooperation between IDSs among neighborhood nodes to reduce their individual active time. Usually, an IDS has to run all the time on every node to oversee the network behavior. This can turn out to be a costly overhead for a battery-powered mobile device in terms of power and computational resources. Hence, in this work our aim is to reduce the duration of active time of the IDSs without compromising on their effectiveness. To validate our proposed approach, we model the interactions between IDSs as a multi-player cooperative game in which the players have partially cooperative and partially conflicting goals. We theoretically analyze this game and support it with simulation results.

Keyword- self-configuration, intrusion detection system, probabilistic, conflicting goals.

1 INTRODUCTION:

The term MANET (Mobile Ad hoc Network) refers to a multi hop packet based wireless network composed of a set of mobile nodes that can communicate and move at the same time, without using any kind of fixed wired infrastructure. MANET is actually self organizing and adaptive networks that can be formed and deformed on-the-fly without the need of any centralized administration. Otherwise, a stand for "Mobile Ad Hoc Network" A MANET is a type of ad hoc network that can change locations and configure itself on the fly. Because MANETS are mobile, they use wireless connections to connect to various networks. This can be a standard Wi-Fi connection, or another medium, such as a cellular or satellite transmission.



Fig 1 Structure of MANET

The purpose of the MANET working group is to standardize IP routing protocol functionality suitable for wireless routing application within both static and dynamic topologies with increased dynamics due to no demotion and other factors. Approaches are intended to be relatively lightweight in nature, suitable for multiple hardware and wireless environments, and address scenarios where MANETs are deployed at the edges of an IP infrastructure. Hybrid mesh infrastructures (e.g., a mixture of fixed and mobile routers) should also be supported by MANET specifications and management features. Using mature components from previous work on experimental reactive and proactive protocols, the WG will develop two Standards track routing protocol specifications:

- Reactive MANET Protocol(RMP)
- Proactive MANET Protocol(PMP)

If significant commonality between RMRP and PMRP protocol modules is observed, the WG may decide to go with a converged approach. Both IPv4 and IPv6 will be supported. Routing security requirements an issues will also be addressed. The MANET WG will also develop a scoped forwarding protocol that can efficiently flood data packets to all participating MANET nodes. The primary purpose of this mechanism is a simplified best effort multicast forwarding function. The use of this protocol is intended


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A NOVEL TECHNIQUE FOR EFFICIENT USAGE OF INTRUSION DETECTION SYSTEM IN MOBILE AD HOC NETWORKS

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ABSTRACT

Mobile Ad hoc Networks (MANET) are selfconfiguring, infrastructureless, dynamic wireless networks in which the nodes are resource constrained. Intrusion Detection Systems (IDS) are used in

MANETs to monitor activities so as to detect any intrusion in the otherwise vulnerable network in this paper; we present efficient Schemes for analyzing and optimizing the time duration for which the intrusion detection systems need to remain active in a mobile ad hoc network. A probabilistic model is proposed that makes use of cooperation between IDSs among neighborhood nodes to reduce their individual active time. Usually, AN ID has to run all the time on every node to oversee the network behavior. This can turn out to be a costly overhead for a battery-powered mobile device in terms of power and computational resources. Hence, in this work our aim is to reduce the duration of active time of the IDSs without compromising on their effectiveness. To validate our proposed approach, we model the interactions between IDSs as a multi-player cooperative game in which the players have partially cooperative and partially conflicting goals. We theoretically analyze this game and support it with simulation results.

KEYWORDS: A *mobile ad hoc network* (MANET) is a self-organized collection of mobile nodes.

INTRODUCTION

A *mobile ad hoc network* (MANET) is a self-organized collection of mobile nodes which communicate with each other without the help of any fixed infrastructure or central

A Case Study on Reducing Coal Consumption of Cogeneration Power Plant

38

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Abstract-This case study is carried out at M/s Raymond UCO Denim Private Limited Yavatmal for 6 MW cogeneration power plant. The aim of this work is to reduce the coal consumption of cogeneration power plant by recovering some amount of heat of steam which is actually wasted in current cogeneration power plant system. This loss of heat takes as steam is condensed in condenser. This heat can be recovered by circulating DM water as a cooling water in condenser thus extracting the heat of steam and then using this DM water as feed water of boiler. Due to this the amount of coal required for heating the boiler water to a desired temperature is reduced. We have calculated the annual savings of coal which we will obtain if we use DM water as a cooling water in the condenser. Also in current system the pressure reducing and desuperheating system is used for reducing pressure and temperature of steam. The same objective can be obtained if we replace this system by a turbine and in addition to this we also get power as steam is expanded in turbine.

Index Terms- Raymond UCO Denim Pvt. Ltd, coal, DM water and PRDS system.

1. INTRODUCTION

Raymond is one of the leading group in the Indian textiles market. Denim plant of Yavatmal is one of the largest Denim fabric producer in India. Raymond UCO Denim is well recognized in India and created a favourable image in international market. Raymond Yavatmal has been very keen on energy conservation from the beginning and has adopted all the latest technology available for Energy conservation. Raymond has its own power plant and produces its own power for the operations carried out in the Raymond. The power plant is of cogeneration type from which the heat is utilized for processing of clothes and cotton materials. Steam power plants are producing about half of the total power requirement in India. In a steam Power plant, thermal energy is used to raise steam that is used to run steam turbines to produce mechanical energy. This mechanical energy is converted into electrical energy in a generator. Steam power plants are suitable for large scale production of electrical power and supply of process steam for denim cloth manufacturing.

2. LITERATURE REVIEWS

Darshan H Bhalodia, Darshit B Parikh in his paper on "A case study of thermodynamic analysis of cogeneration power plant" in IRJET journal used the first law of thermodynamics in order to determine various losses occurring in the plant in order to improve the performance of the power plant. They have studied Energy flows in a boiler. They calculate

the boiler efficiency using indirect method after estimating various heat losses in the boilers. From results they find the overall thermal efficiency of the plant by computing the individual efficiency of the boiler (79.4%), steam turbine (33.57%), and generator (98%) appears to be 26.2%.

Anjali T H and Dr. G Kalivarathan, in his paper on "Reducing coal consumption by recovering heat" in journal IRJET has done the Thermodynamic analysis of the thermal power plant to increase the efficiency and reliability of steam power plants. Most of the power plants are designed by the energetic performance criteria based on first law of thermodynamics only. The present work deals with the comparison of energy and exergy analysis of thermal power plant stimulated by coal. Generally, it is predicted that even a small improvement in any part of the plant will result in a significant improvement in the plant efficiency. Factors affecting efficiency of the Thermal Power Plant have been identified and analyzed for improved working of thermal power plant. Hence they use the energy analysis and exergy analysis based on the first law of thermodynamics and second law of thermodynamics respectively, to identify the locations and magnitudes of losses in order to maximize the performance of a 15 MW thermal power plant in a paper mill, to evaluate the boiler, turbine and condenser efficiencies.

P.Vivek, P. Vijayakumar, has studied the heat recovery steam generator or HRSG and found that it produces steam that can be used in a process it works

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A Review on Finite Element Analysis of Curved Plate Overlapping Welded Joint

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Abstract – Basically a welded joint is a permanent joint which is obtained by fusion of the edges of the two plates to be joined together with or without application of pressure and filler material. Welding is extensively used in fabrication as an alternative method for casting or forging and as a replacement for a bolted and riveted joint. Since it is related to human being, it is necessary to design and analysis the joint with prior attention to safety of its user. A better approach to the prediction of welding deformation is using the combined technologies of experiments with numerical calculation. With modern computing facilities, the Finite Element (FE) technique has become an effective method for prediction and assessment of welding residual stress and distortions various factors, the quantitative prediction and the control of welding deformation especially for a large and complex welded structure is extremely difficult. Typical welds are done on flat surfaces and their strengths are well catalogued for reference. If a lap joint is required for longitudinal plates, the reference for taking overlap length is available. When a lap joint is required for curved plates, no reference is available for it. The objective of this project is to determine optimized overlapping angle and suitable welding configuration among single end weld joint and both end weld joint.

Key words: finite element analysis, curved plate stress and vibration analysis

I. INTRODUCTION

Welding is a fabrication process used to join materials, usually metals or thermoplastics, together. During welding, the pieces to be joined (the workpieces) are melted at the joining interface and usually a filler material is added to form a pool of molten material (the weld pool) that solidifies to become a strong joint.

A. Types of Welding:

There are many different types of welding processes and in general they can be categorized as:

B. Arc Welding:

A welding power supply is used to create and maintain an electric arc between an electrode and the base material to melt metals at the welding point. In such welding processes the power supply could be AC or DC, the electrode could be consumable or non-consumable and a filler material may or may not be added. The most common types of arc welding are:

C. Shielded Metal Arc Welding (SMAW)

SMAW is a welding process that uses a flux covered metal electrode to carry an electrical current. The current forms an arc that jumps a gap from the end of the electrode to the work. The electric arc creates enough heat to melt both the electrode and the base material(s). Molten metal from the

electrode travels across the arc to the molten pool of base metal where they mix together. As the arc moves away, the mixture of molten metals solidifies and becomes one piece. The molten pool of metal is surrounded and protected by a fume cloud and a covering of slag produced as the coating of the electrode burns or vaporizes. Due to the appearance of the electrodes, SMAW is commonly known as 'stick' welding.

D. Gas Metal Arc Welding (GMAW):

In the GMAW process, an arc is established between a continuous wire electrode (which is always being consumed) and the base metal. Under the correct conditions, the wire is fed at a constant rate to the arc, matching the rate at which the arc melts it. The filler metal is the thin wire that's fed automatically into the pool where it melts. Since molten metal is sensitive to oxygen in the air, good shielding with oxygen-free gases is required. This shielding gas provides a stable, inert environment to protect the weld pool as it solidifies. Consequently, GMAW is commonly known as MIG (metal inert gas) welding. Since fluxes are not used (like SMAW), the welds produced are sound, free of contaminants, and as corrosion-resistant as the parent metal. The filler material is usually the same composition (or alloy) as the base metal. GMAW is extremely fast and economical. This process is easily used for welding on thin-gauge metal as well as on heavy plate. It is most commonly performed on steel (and its alloys), aluminum and magnesium, but can be used with other metals as well. It also requires a lower level of operator skill than the other two methods of electric arc welding discussed in these notes. The high welding rate and reduced post-weld cleanup are making GMAW the fastest growing welding process.

E. Gas Tungsten Arc Welding (GTAW):

A process that uses a non-consumable tungsten electrode to produce the weld. The weld area is protected from atmospheric contamination by a shielding gas, and a filler metal that is fed manually is usually used.

F. Gas Welding:

In this method a focused high temperature flame generated by gas combustion is used to melt the workpieces (and filler) together. The most common type of gas welding is Oxy-fuel welding where acetylene is combusted in oxygen.

G. Resistance Welding:

Resistance welding involves the generation of heat by passing a high current (1000–100,000 A) through the resistance caused by the contact between two or more metal surfaces where that causes pools of molten metal to be formed at the weld area. The most common types of resistance welding are Spot-welding (using pointed

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"AN INTELLIGENT HIGHWAY VEHICULAR SYSTEMS SURVEY IN TRAFFIC
CONTROLLING"

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ABSTRACT: Traffic congestions in highway networks are one of the focal issues to tackle by recent trends in traffic management schemes. Automation is made by combining the increasing market saturation of on-line communication, navigation as well as advanced driver assistance systems which results in intelligent vehicle highway systems that deal out in between roadside infrastructure and vehicles and that are one of the most promising solutions for traffic congestion problem. This review work helps to concentrate on traffic management and control frameworks for intelligent vehicle highway systems. This work overview on current use traffic control methods for freeways. Then, we discuss intelligent vehicle highway systems based traffic control measures and various traffic management architectures for IVHS such as PATH, Dolphin, Auto21 CDS and some others.

Keywords: Intelligent Transportation Systems (ITS), Intelligent vehicle highway systems (IVHS), Automated Highway Systems (AHS), intelligent vehicles (IVs).

1. INTRODUCTION

On growing traffic systems demand, modern societies well-planned with road management systems and made sufficient infrastructures for transportation still face the problem of traffic congestion. [1][2] This results in loss of travel time and huge societal and economic costs. Manufacturing new roads also helps for managing the traffic congestion problem, but it is less feasible due to political and environmental circumstances. In another way it could be done by the help of by the use of existing infrastructure [3] [4]. Traffic management and control approaches are used to control the traffic flows and to prevent or reduce traffic jams to improve the performance of the traffic system [5] [6]. Possible performances measures in this context are throughput, travel times, safety, fuel consumption, emissions, reliability [7] [8] [9] [10]. Implemented traffic management approaches uses of roadside-based traffic control methods such as ramp metering, traffic signals, dynamic route information panels, and dynamic speed limits and infrastructure-based equipment including sensors and traffic control centres[11] [12] [13]. These measures and the corresponding equipment will be indicated by the term "Roadside Infrastructure" [14] [15].

To improve the existing traffic control systems advance technologies in this field of communication, control, and information systems are combined with transportation infrastructure and equipment [16] [17]. This marks the emergence of a next level/next generation of traffic control and management approaches and serves as the motivation for ITS or IVHS. ITS and IVHS incorporate intelligence in both roadways infrastructure and involves in vehicles with intention to reduce congestion and environmental impact, improvement in traffic performance by exploiting the distributed nature of the system and by making use of cooperation, coordination between the various vehicles and the various elements of the roadside infrastructure[18].

In IVHS, Driver tasks include activities such as steering, braking and making control decisions about speed

and safety roadways. AHS go one step up than IVHS and completed automation of driving task. For making better coordination of traffic activities, AHS distributes intelligence between vehicles and roadside infrastructure. This work focuses on AHS, relations and interactions between the vehicles in AHS as well as roadside infrastructure. An important component of IVHS and AHS are IVs, which sense the environment around them using sensors and strive to achieve more efficient vehicle operation either by assisting the driver or by taking complete control of the vehicle. These IVs also support V to V and V to RC Based on extent to which roadside and vehicle could work together which are discussed further.

2. CONTROL DESIGN METHODS

In existing systems different control methodologies have been presented for controlling and overseeing a traffic network in where vehicles are driven by humans. Here control design methodologies for freeway traffic control that are currently most often used in practice such as

- Static feedback control,
- Optimal control and model predictive control,
- Artificial intelligence techniques.

2.1 Static feedback control

2.1.1 General concepts

Dynamical systems can be controlled in two ways: using open-loop control and using closed-loop control. In an open-loop system, the control input does not depend on the output of the system, whereas in a closed-loop system, the control action is a function of the output of the system. Feedback or closed-loop control systems are suited for applications that involve uncertainties or modelling errors. In "static 1" feedback control methods, the controller gets measurements from the system and determines control actions based on the current state of the system in such a way that the performance of the system is improved. The





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Literature Review on Image Media Diversity in a Security Survival for Digital Image Sharing Schemes

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ABSTRACT: The conventional Visual Secret Sharing Schemes (VSS schemes) hide a Secret image in shares which appear as noiseless picture. VSS schemes suffer from a transmission risk problem while sharing Secret Images because it increases interception risk during transmission of the shares. To avoid this problem, the proposed natural-image-based VSS scheme (NVSS scheme) shares secret images via various carrier media to protect the secret as well as the participants during the transmission phase and also to reduce the transmission risk problem. The NVSS scheme involves one digital secret image, n -natural images and one carrier image. The natural images can be any photo or picture in digital form. Using these natural images, key is generated. With the help of this generated key and secret digital image, a noisy share is created. The natural images are transmitted using different carrier media. Hence the transmission risk is reduced.

KEYWORDS: Visual secret sharing scheme, Extended Visual Cryptography scheme, natural images, natural shares, secret digital image, etc.

I. INTRODUCTION

Visual Cryptography (VC) is a method that hides a secret image into n number of shares and securely shares secret images in non-computer-aided environments. But this increases the transmission risk problem. Thus, sharing visual secret images in computer-aided environments has become an important issue today. The proposed natural image based visual secret sharing (NVSS) scheme use diverse media for hiding secret image and reduces the transmission risk problem. The carrier media in the scheme contains digital images, printed images, hand-painted pictures, etc. We also apply digital watermarking to natural shares to maintain integrity of images.

In the conventional technique, ' $n+2$ ' images are used for secret sharing (n for natural images, one carrier image, and one secret image). The natural images ' n ' are distributed to participants. The key is required for encryption of secret image and is generated from ' n ' natural images. At receiver side, anyone who holds fewer than ' n ' natural images cannot generate a key. By stacking ' n ' natural images, the key reveals and we can decrypt the secret image [1]. Conventional shares consist of many random and meaningless pixels which satisfy the security requirement for protecting secret contents, but they suffer from two drawbacks: first is a high transmission risk because noise-like shares. Second is the number of shares increases; it becomes more difficult to manage the shares. Thus, the risk to both the participants and the shares increases, which increases the probability of transmission failure. The shares contain noise-like pixels. These shares can be embedded in another carrier image by the process called steganography.

In proposed NVSS scheme, we handle ' n ' natural images and two images as one carrier image, another one as a secret image. I can share a digital secret image over $n-1$ arbitrary natural images and one share. Instead of changing the natural images it extracts the features from each natural image and generates the numeric key. To increase the security level, the generated shares can be concealed by the data hiding technique during transmission. In this paper, we develop encryption, decryption, share hiding, share extraction algorithm for NVSS scheme. The possible ways to hide the generated shares are also discussed. The proposed scheme provides three level securities, reduces transmission risk and increases the contrast of the natural image.

Image Media Diversity in a Security Survival for Digital Image Sharing Schemes

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Abstract- The previous technique of sharing the digital image i.e. Visual Secret (VSS) suffers from a transmission risk problem while sharing. To reduce such a problem, this paper gives the solution for solving it. The natural-image-based VSS scheme (NVSS scheme) is the proposed technique used to reduce the transmission risk problem and also to protect the participant while sharing the digital image. In NVSS scheme, one digital image, n -natural images and one carrier image are needed. The natural images (or natural shares) can be digital image and printed image. As the value of n increases, the NVSS scheme uses only one noise share for sharing the secret image. With the help of extracted features, secret image will be encrypted where process carried by $(n-1)$ natural shares. This encrypted result will be hid by using the QR code. The recovering of the secret image at the receiver will be done by the Share Extraction Algorithm or decryption process. The transmission risk is reduced by transmitting the natural images using diverse media.

Index Terms- Visual secret sharing scheme, Extended Visual Cryptography scheme, natural images, natural shares, secret digital image, etc.

1. INTRODUCTION

The Extended Visual Cryptography Scheme (EVCS) is a user-friendly scheme. Visual Cryptography (VC) is a special image encryption technique. It is different from traditional cryptography, because it does not need complex computation to decrypt. In the decryption process of this method, where without any complex cryptographic computation encrypted. Visual cryptography is a simple and powerful method which can provide high security for confidential information. In EVCS method, constructing a set of noise-like shares that are pixel expansion free. Then directly adds a cover image on each share via a stamping algorithm. So, the pixel expansion can be removed entirely and the message is encoded into a binary pattern. In each Share image, each message pixel is represented by a fixed size binary pattern which is called as a share, in which two of the four sub pixels selected randomly are black. The pixel expansion problem therefore consists because of sub pixels.

The disadvantages of Extended Visual Cryptography Scheme (EVCS) are as follow:

- In VSS schemes, the decryption process need not require computation; it may be difficult to analyze every share without computers.
- It would not investigate combinations and/or statistical data of pixels in shares.
- Storage and transmission of the shares requires an amount of storage and bandwidth resources which

equivalent to the size of the secret times the number of shares.

- Expansion of the original pixels on the secret images in encryption, which makes lower level of contrast of the reproduced images.

Half-tone shares are generated, because the secret information is embedded into the Half-tone shares and it will give the result as recovered good quality of image. The shares contain many noise-like pixels or display low-quality images. Such shares are easy to detect by the naked eye. This meaningless shared data were embedded into the cover image to form stego images.

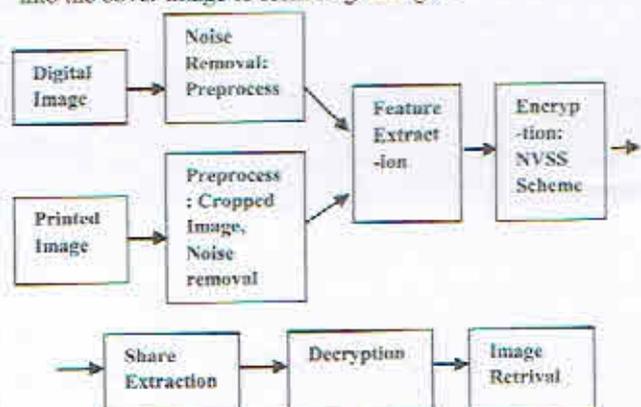


Fig. 1. The (n, n) -NVSS process.

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Earthquake Resistant Design Of Open Ground Storey Framed Building

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Abstract: Today all over the world, multistoried buildings with open (soft) ground floor are inherently vulnerable to collapse due to earthquake load, their construction is still largely practiced in the developing nations. Social and functional need to provide car parking space at ground level gives the warning against such buildings from engineering community. The building is being modeled as an 3D space frame with six degrees of freedom at each node using the software STAAD-Pro V8i. Analysis is performed for Bare Frame,Bare frame having open ground storey, Frame with infill wall, open ground story frame, frame with stiffer column size having open ground storey. Results are obtained for axial force, shear and moments for columns and are compared.

Key Words: Soft Storey,Earthquake,infill,multistorey.

earthquake is fully dependent on its natural period, the seismic force distribution is dependent on the distribution of stiffness and mass along the height

1.INTRODUCTION

It has always been a mans desire to create taller and bigger structures. Development of metro cities in India there is increasing demand in High Rise Building.The building with soft story behaves differently as compared to a bare framed building(without considering any infill) or a fully infilled framed building under lateral load. A bare frame is drastically less resistant than a fully infilled frame; it resists the applied lateral load through frame action and shows well-distributed plastic hinges at failure. An appropriate way to analyze the Soft story buildings is to model the strength and stiffness of infill walls. Unfortunately, there are no guidelines are given in IS 1893: 2002 (Part-1) for modeling the infill walls.the upper storey during the earthquake move almost together as a single block and most of the horizontal displacement occurs in the soft ground storey of the building. In other words, these types of buildings sway back and forth like an inverted pendulum. Analytical models based on the concept of the equivalent diagonal strut, considering the whole structure as an Monolithic and equivalent braced frame system with a diagonal compression strut replacing the infill,provide an accurate prediction of the behavior of steel frames. The total seismic base shear as experienced by a building during an



Fig-1:Soft storey

2.ANALYSIS AND MODELLING

The building considered in the present report is G+6 Bare Frame structure, Frame structure with infill wall, Open ground story structure and Frame structure with stiffer column size. Complete analysis is carried out for dead load, live load & seismic load using STAAD-Pro V8i. All combinations are Considered as per IS 1893:2002.

Typical plan of building is shown in Fig-2


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Space Mouse

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Abstract: Space Mouse opens a new age for man-machine communication. This device is based on the technology used to control the first robot in space and has been adapted for a wide range of tasks including mechanical design, real time video animation and visual simulation. It has become a standard input device for interactive motion control of three-dimensional graphic objects in up to six degrees of freedom. Space Mouse works with standard serial mouse interface without an additional power supply. The ergonomic design allows the human hand to rest on it without fatigue. Thus, flying an object in six degrees of freedom is done without any strain.

Keywords: DLR; 3D, etc...

1.0 INTRODUCTION

Every day of your computing life, you reach out for the mouse whenever you want to move the cursor or activate something. The mouse senses your motion and your clicks and sends them to the computer so it can respond appropriately. An ordinary mouse detects motion in the X and Y plane and acts as a two dimensional controller. It is not well suited for people to use in a 3D graphics environment. Space Mouse is a professional 3D controller specifically designed for manipulating objects in a 3D environment. It permits the simultaneous control of all six degrees of freedom – translation rotation or a combination. The device serves as an intuitive man machine interface.

The predecessor of the space mouse was the DLR controller ball. Space Mouse has its origins in the late seventies when the LDR (German Aerospace Research Establishment) started research in its robotics and system dynamics division on devices with six degrees of freedom (6 dof) for controlling robot grippers in Cartesian space. The basic principle behind its construction is mechatronics engineering and the multisensory concept. The Space Mouse has different modes of operation in which it can also be used as a two-dimensional mouse.

2.0 COMPUTER MOUSE

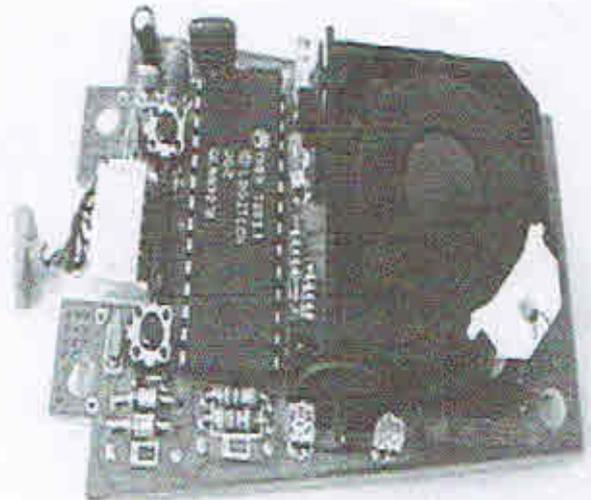
2.1 How does Computer Mouse work?

Mice first broke onto the public stage with the introduction of the Apple Macintosh in 1984, and since then they have helped to completely

redefine the way we use computers. Every day of your computing life, you reach out for your mouse whenever you want to move your cursor or activate something. Your mouse senses your motion and your clicks and sends them to the computer so it can respond appropriately.

2.2 Inside a Mouse

The main goal of any mouse is to translate the motion of your hand into signals that the computer can use. Almost all mice today do the translation using five components.



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Fig.1: The guts of a Mouse

A ball inside the mouse touches the desktop and rolls when the mouse moves.

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Modulating Technique Based Cascaded Multilevel Inverter using Voltage Multiplier

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ABSTRACT: The inclusion of multilevel inverter (MLI) in power electronics is steadily increasing in various industrial sectors. The work in this paper presents symmetrical cascaded H-bridge MLI that can be implemented to reduce the number of dc input power supply and harmonic contents present in it. The involvement of proposed topology with voltage multiplier significantly decreases the number of dc sources, providing equalization of voltage across switches with higher efficiency. The numerous sinusoidal pulse width modulation (SPWM) strategies are analysed to get reduced Total harmonic distortion (T.H.D) in output voltage waveform without using filter. The topologies mainly designed for 9-level(line to line) and further can be extended for N level using $(3N-3)/2$ switches and $(N-1)/4$ dc sources with voltage multiplier. The proposed topology with voltage multiplier for 9-level is simulated for various modulation index using different multicarrier SPWM and additional techniques like trapezoidal, multi-reference, staircase PWM techniques. The results obtained are evaluated using MATLAB/SIMULINK.

KEYWORDS: Multilevel inverter, Voltage multiplier, Multicarrier SPWM, T.H.D.

I. INTRODUCTION

In the last few decades, multilevel inverter has become interest of study in the several industrial sectors. Due to the capability of adapting advantageous features it is more feasible for high voltage high power applications [1]. The main consideration taken in to account while formulating multilevel inverter is the undesirable harmonics and number of switches to be reduced. Plenty topologies [2][3] so far suggested must cope with following fulfilments,

- It should be capable of enduring minimum number of dc input voltage sources and
- It should have less switching devices.

In general the performance of an inverter with any switching strategies depends upon the harmonic contents at its output voltage. In multilevel technology there are several PWM modulation strategies, among them multicarrier SPWM technique [4] dominated other techniques due to its feasible characteristics in suppressing harmonic distortion.

In this paper, several cascaded H-bridge topologies [5] with symmetrical dc input source is studied. The comparative study of various topologies is carried out using various different level shifting SPWM techniques. The conventional H-bridge with 9 level using 16 switches [6], 9 level using 11 switches [7], 9 level using 10 switches [8] requires more number of switching devices is depicted in Fig.1(a)-(c). Acquiring high number of switches decreases the efficiency and performance due to switching and conduction losses. Although as depicted in Fig.1 (d), 9 level using 8 switches [9] requires less number of switching devices provided there is unbalance in voltage across each switch. With the sharp contrast to these topologies the disadvantages can be overcome by proposed topology with voltage multiplier [10]. In many drive related applications separate dc sources precludes the use of an inverter, to minimize the number of dc sources voltage multiplier is included [11]. The comparison of various topologies based on number of devices and maximum number of switches ON is shown in table.I.





Identifying Structured Attributes by Jointly Using Content and Querying Values

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ABSTRACT

Document annotation is the task of adding metadata information in the document which is useful for information extraction. In many applications domain textual data contains significant amount of structured information which is in unstructured text. So that is always difficult to find relevant information. This paper proposes, an adaptive technique that facilitates the generation of structured metadata by identifying documents containing information of interest. Such information is further useful for querying the database. This paper proposes survey on Collaborative Adaptive Data sharing platform (CADS) for document annotation and use of query workload to direct the annotation process. A key novelty of CADS is that it learns with time the most important data attributes of the application, and uses this knowledge to guide the data insertion and querying.

Keywords – Adaptive forms, Collaborative Adaptive Data Sharing platform, Document annotation, Query value, unstructured data.

1. INTRODUCTION

Nowadays the presented output on searching some type of a particular document is a primary requirement. To get such collected search output, we have to maintain documents, information and data in smart way i.e. stored data in structured and unstructured format. Annotation technique is one of the best featured techniques to manage such documents and get effective search result. Attribute – value pairs are generally more meaningful and significant as they can contain more information than un-typed approaches.

Efforts to keep such decent maintenance of such un-annotated documents user has to take extra efforts. A scenario is cumbersome, complicated and tedious where there are number of fields to be filled at time of uploading a particular document. Hence end user frequently ignores such annotation capabilities. User is still unresponsive and ignoring task though system offers the facility to randomly annotate the data with attribute-value pairs. Along with this there it also has unclear usefulness for subsequent searches in the future. Such difficulties finally tend to very basic annotations, if any at all, that are often limited to simple keywords. Such simple annotations make the analysis and querying of the data cumbersome.

It's the fact that this effective but ignored attribute – value paired annotation scheme can bring smooth searching and maintenance and this motivated us to work on Collaborative Adaptive Data Sharing platform (CADS), which is an "annotate-as-you create" infrastructure that facilitates fielded data annotation. The contribution of our system is the direct use of the query workload to direct the annotation process, in addition to checking the content of the document. Along with this contribution we are also working on phrase

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extraction process to build knowledge out of text. CAD provides cost effective and good solution to help efficient search result. The goal of CADS is to support a process that creates nicely annotated documents that can be immediately useful for commonly issued semi-structured queries of end user.

This paper is divided in five sections; in section II some earlier related work is explained. In section III, proposed system is explained. In section IV, the architecture is given. In section V, Experimental work & algorithm are performed which may be satisfied. In section VI mathematical modeling is shown. Finally in section VII, the conclusion.

2. RELATED WORK

Currently available information sharing tools, like content management software annotate document in an ad hoc way. For Google Base, there is predefined template available, which facilitates subsequent information discovery.

Some systems do not have attribute-value annotation would make querying feasible. An annotations strategy that uses attribute-value pairs contains more information than untyped approaches which are more expensive. For such annotations user must be aware of using and applying annotations. In such cases users are not ready to perform the task though system allows user to perform required task. Such annotations are limited to simple keywords making the analysis and querying data of the data cumbersome. So, there is need of appropriate annotation of the document.

Author	Method	Limitations
I.Eduardo J.	Collaborative	Initial annotations are

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Implementation of Message Authentication Scheme for Elliptic Curve Cryptography in Wireless Sensor Networks

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Abstract : Message authentication is one of the most effective ways to thwart unauthorized and corrupted messages from being forwarded in wireless sensor networks (WSNs). For this reason, many message authentication schemes have been developed, based on either symmetric-key cryptosystems or public-key cryptosystems. Most of them, however, have the limitations of high computational and communication overhead in addition to lack of scalability and resilience to node compromise attacks. To address these issues, a polynomial-based scheme was recently introduced. However, this scheme and its extensions all have the weakness of a built-in threshold determined by the degree of the polynomial: when the number of messages transmitted is larger than this threshold, the adversary can fully recover the polynomial. In this paper, we propose a scalable authentication scheme based on elliptic curve cryptography (ECC). While enabling intermediate nodes authentication, our proposed scheme allows any node to transmit an unlimited number of messages without suffering the threshold problem. In addition, our scheme can also provide message source privacy.

1. Introduction

Message authentication plays a key role in thwarting unauthorized and corrupted packets from being circulated in networks to save precious sensor energy. For this reason, many schemes have been proposed in literature to provide message authenticity and integrity in network communications [1], [2]. These schemes can largely be divided into public-key-based and symmetric-key-based approaches.

A secret polynomial-based message authentication scheme was introduced in [1]. To thwart the intruder from recovering the polynomial by computing the coefficients of the polynomial, the idea of adding

random noise, called a perturbation factor, to the polynomial was proposed [2]. However, a recent study shows that the random noise can be completely removed from the polynomial using error-correcting code techniques [3]. In this paper, we propose an unconditionally secure and efficient source anonymous message authentication (SAMA) scheme, based on the optimal modified ElGamal signature (MES) scheme on elliptic curves. This MES scheme is secure against no-message attacks and adaptive chosen-message attacks in the random oracle model [4]. Our scheme enables the intermediate nodes to authenticate the message so that all corrupted packets can be dropped to conserve sensor power. While achieving compromise-resiliency, flexible-time authentication and source identity protection, our scheme does not have the threshold problem. Both theoretical analysis and simulation results demonstrate that our proposed scheme is more efficient than the polynomial-based algorithms under comparable security levels.

2. Literature Review:

A secret polynomial-based message authentication scheme was introduced in [1]. This scheme offers information theoretic security with ideas similar to a threshold secret sharing scheme, where the threshold is determined by the degree of the polynomial. When the number of messages transmitted is below the threshold, the scheme enables the intermediate node to verify the authenticity of the message through polynomial evaluation. However, when the number of messages transmitted is larger than the threshold, the polynomial can be fully recovered and the system becomes completely broken. To increase the threshold and the complexity for the intruder to break the secret polynomial, random noise, also called a perturbation factor, was added to the polynomial in [2]. The main idea is to thwart the adversary from computing the coefficient of the polynomial. However, the added perturbation factor can be completely removed using error-correcting code techniques [3]. The recent progress on elliptic curve

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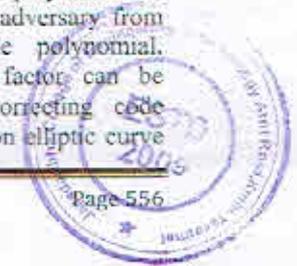
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**EXPERIMENTAL INVESTIGATION AND PERFORMANCE ANALYSIS
OF DIETHYL ETHER (DEE) AND TERT-AMYL ETHYL ETHER (TAEE)
BLEND WITH DIESEL IN C.I.D.I ENGINE: A REVIEW****Pratik H. Rathod¹, Prof.D.S.Darunde²**

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Asst.professor², Department of Mechanical Engineering, Dr.Rajendra Gode Institute of Technology & Research, Amravati, Maharashtra, India

ABSTRACT

Diesel has a mark as traditional hydrogen structure as conventional fuel. In the new trends of investigation of alternative fuel there immerses number of alternative fuels; one of the alternatives is ether. In this experimental analysis there is a study of Diethyl ether (DEE) and Ter-amyl ethyl ether (TAEE) when blended with diesel fuel and its comparison with conventional diesel fuel. There is Comprehensive analysis on combustion characteristics such as cylinder pressure, heat release and performance characteristics, specific fuel consumption and break thermal efficiency are carried out in the analysis 5%, 10%, 15% ethers was blended with the diesel which is compared with the conventional diesel and the result of performance and combustion are found to be satisfactory. The experimental results of this study can be summarized as follows. The blending of diesel fuel with ether gives same results as the conventional diesel fuel. The performance characteristics and combustion characteristics are more or less same as that of the conventional diesel fuel. So from this study we can predict that if diesel is blended with 5% or 10% of ether then it will not affects the C.I.D.I Engine adversely.

Keywords: *Diethyl ether (DEE) and Ter-amyl ethyl ether (TAEE), Diesel fuel, Compression Ignition Direct Injection (C.I.D.I Engine)*

I. INTRODUCTION

Petroleum resources are finite and therefore search for alternative is continuing all over the world. Development of bio-fuels as an alternative and renewable source of energy for transportation has become critical in the national effort towards maximum self-reliance the corner stone of our energy security strategy. Bio- fuels like ethanol and bio-diesel being environment friendly, will help us to conform to the stricter emission norms. International experience has demonstrated the advantages of using ethanol and methanol as automotive fuel. Since blends below 10% of ethanol do not present any problem and reduce harmful emission, a decision has already been taken to blend 5% ethanol with motor spirit w.e.f. 1.1.2003 in a number of States. To achieve higher blending, a concerted programme for use of bio mass for conversion to alcohol is essential including expansion of area under sugarcane cultivation.

High Speed Diesel (HSD) is the main transport fuel hence introduction of biodiesel both as a diesel substitute and for blending with Petroleum diesel both as a diesel substitute and for blending with Petroleum diesel is an imperative need. Bio-diesel commands crucial advantages such as technical feasibility of blending in any ratio with petroleum diesel fuel, use of existing storage facility and infrastructure, superiority from the environment and emission reduction angle, its capacity to provide energy security to remote and rural areas and employment generation. Moreover, crops like sunflower, rapeseed and tree borne oil seeds like *Jatropha curcas* provide rich bio mass and nutrients to the soil and check degradation of land -a major problem affecting nearly 65 million hectares of land.

Diesel engines are broadly used in medium and heavy duty application because of their lower fuel combustion, higher break thermal efficiency and lower emission (such as CO and HC) compared with gasoline engines. Depletion of petroleum derivatives increases the research interest in the area of alternative fuels. The addition of oxygen containing compounds to diesel fuel has been proposed as a method of carbonaceous particulate

Performance Optimization of Mixed Flow Impeller by Ansys CFX

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Abstract—In this paper, the results from numerical studies of the flow of mixed flow pump is presented here and compared. The results agree well with measurements at best efficiency flow conditions. The overall range of H-Q characteristics is predicted and has matched well with the measurements. The predictions for efficiency at the design of flow conditions are seen to be deviating from the one actually measured. Some more investigation are needs to be done in this direction. Similar exercise is being carried out for pumps with different specific speeds. The CFD analysis is an effective tool to calculate the effect of design and operating parameter of pump.

Keywords—Computational Fluid Dynamics, Mixed Flow Impeller, Mixed Flow Pump Impeller, Solid Works 2009.

I. INTRODUCTION

A pump is used to move fluids (liquids or gases) or sometimes slurries by mechanical movement. Pump is a mechanical device generally used for raising liquids from a lower level to a higher one. This is achieved by creating a low pressure at the inlet of impeller and high pressure at the outlet of the impeller of pump. This work has to be done by a prime mover to impart mechanical energy to the liquid which ultimately converts into pressure energy. It is widely in used in industries and residential applications. Centrifugal pumps are the machines, which employ centrifugal force to lift from a lower level to a higher level by developing pressure [2]. The centrifugal pump moves liquid by rotating one or more impellers inside a volute casing. The liquid is entered through the casing inlet to the eye of the impeller where it is picked up by the impeller vanes.

In the mixed flow pump, addition of the pressure to the liquid occurs when the flow of liquid is in axial as well as radial direction. This type of pump in which the liquid passed through impeller is as combination of axial and radial direction. The head is developed partly by the action of centrifugal force and partly by the propelling force. These pumps mostly suitable for irrigation purpose where large quantity of water at a lower head. In this pump, addition of energy to the liquid occurs.

A centrifugal pump is a rotodynamic machine that uses a rotating impeller to increase the pressure of a fluid. They are widely used for liquid transportation [1].

different sectors. Their operating range spans from full-load down to close to the shut-off head. In order to develop a reliable machine for this highly demanding operation, the behaviour of the flow in the entire pump has to be predicted before they are put in actual use. This requires critical analysis of highly complex flow in the pump which is turbulent and three dimensional in nature. The flow analysis through experiments or model testing is considered to be time consuming, tedious and expensive [3]. CFD is the present day state-of-art technique in fluid flow analysis. In recent years, most of the industries are widely using CFD as a numerical simulation tool for flow analysis of centrifugal pumps. Due to the development of CFD, one can predict the efficiency of the system as well as observe actual behavior.

II. COMPUTATIONAL FLUID DYNAMICS

CFD may be used to determine the performance of a component at the design stage, or it can be used to analyses difficulties with an existing component and lead to its improved design. The first step is to identify the region of interest and The geometry of the region of interest is then defined. If the geometry already exists in CAD, it can be imported directly. The mesh is then created. After importing the mesh into the pre-processor, other elements of the simulation including the boundary conditions (inlets, outlets, etc.) and fluid properties are defined. The flow solver is run to produce a file of results which contain the variation of velocity, pressure and any other variables throughout the region of interest. The results can be visualized and can provide the engineer an understanding of the behavior of the fluid throughout the region of interest [4]. This can lead to design modifications which can be tested by changing the geometry of the CFD model and seeing the effect.

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RESIDUAL STRESS ESTIMATION OF CLADDING PROCESS BY FINITE ELEMENT ANALYSIS: A REVIEW

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ABSTRACT

In this paper, review on residual stress estimation of cladding process by finite element analysis is carried out. Material properties i.e. hardness, yield strength, corrosion resistance, conduction properties plays important role in design structure and product life cycle. It is finding difficult to get a material with all required properties. Hence cladding is done for improving the required properties on the surfaces of base metal. Cladding is done by using method of arc welding and Laser welding. Here, arc welding method is used for cladding and the residual stresses produced during welding are estimated. However, a Finite element analysis finds better approximations and also used to analyze the thermo structural behavior of cladding process. So, an attempt is made to use the Finite Element Analysis for the same. SA508 (Steel) material is considered as the base material and cladding materials are varying to predict the nature of residual stresses ex. Aluminum, Brass and Zirconium. First the geometry is made using ANSYS 14.5 then block by block cladding process is carried out. Then coupled field analysis (i.e. Thermal and structural) is done to find residual stresses. The effects of thickness on residual stress are also analyzed and studied.

Keywords: ANSYS 14.5, Steel (SA508), Cladding, Aluminum, Brass and Zirconium.

1. INTRODUCTION

Nowadays materials require multiple important properties such as high hardness and ductility. Different properties however are often required at different locations on products. Corrosion and wear resistance are only required at the surfaces of products for instance. Surfaces of materials are always in contact with their surrounding, resulting in degradations due to wear, erosion and corrosion. Surface modification aims at reducing such surface degradations. So, the surface modification may involve the application of a coating, it is simply done by using the process of cladding. Surface modification can be applied to all kinds of products to increase performance, reduce costs, and modify the surface properties of material. This enables the realization of products with improved functionality, at reduced use of expensive materials.

Cladding is a process where one material covers another. Cladding supplies a combination of desired properties that not found in any one metal. A base metal can be selected for cost or structural properties, and another metal are added for surface protection or some special property such as high hardness.

2. LITERATURE SURVEY

A. Based on residual stress

KAMAL FARAHAHANINIA, B.S. [1] Mentioned, destructive methods of residual stress analysis are based on the principle that says removing of part of the stressed material and measuring the response of the remaining material as it adjusts its shape to remain in equilibrium. The principle behind electro polishing is controlled by corrosion of metal. This is done possible by applying external potential to the working metal such that it is made anodic with respect to a physically separate counter. The corrosion taking place on the work piece can be increased or decreased by increasing or decreasing the applied current. This makes the current an important variable in electro polishing. The tubular aluminium specimens investigated in this study provided knowledge of the magnitude of residual stresses associated with the tube drawing process. After a comprehensive review of the subject of residual stresses in metals and their measurements, the electro polishing technique was selected as a means of material removal for

FAILURE ANALYSIS OF HELICAL COIL SPRING IN AUTOMOBILE SYSTEM USING FINITE ELEMENT METHOD

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Abstract - It is observed that, in an automobile system the Helical suspension coil springs shows, stress distribution, materials characteristic and manufacturing defects are responsible for the common failures. As the failure affect the performance of spring which is not preferable for suspension system in automobiles. The proposed work of the study is to find out the failure by considering parameter like dynamic and stability response, deflection of spring etc. As well as it is proposed to optimize design this will be safe in every aspect of working of helical spring achieving some goals such as,

- Compensation in weight of spring and cost.
- Higher strength.
- Maximum load failure and deflection.

Key words - Decarburization¹, Helical Coil spring², and Stress distribution³.

1. INTRODUCTION

The vehicle chassis is mounted on axles, not direct but through some form of spring this is to be done to isolate the automobile body from the road shocks which may be in the form of bounce, pitch, roll or sway. These tendencies give rise to an uncomfortable travel and also cause additional stress in automobile frame and body. All the parts which perform the task of isolating the automobile from the road shocks are collectively called the suspension system. Springs are widely used in mechanical instruments with moving parts, to absorb loads, which may be continuously, or abrupt varying. The absorption of the loads takes place in the form of elastic energy. Coil springs are manufactured from rods which are coiled in the form of a helix. The design parameters of a coil spring are the rod diameter, spring diameter and the number of coil turns per unit length. Coil springs are commonly used for automobile suspension and industrial applications. Metal springs have several advantages, they are very cheap to produce and can be produced in almost all kinds of measures and in a very broad range of stiffness. Since the composite materials are anisotropic in nature, the design and manufacture of composite springs are difficult. Therefore the application of composite materials in springs is not yet popular. However they are used in the suspension system of the automobiles. The literature survey has revealed that, only prototype composite springs were prepared and tested for the performance. Since the time consumed for the manufacturing of the composite springs is more, the standard and simple method of mass production of composite coil springs is required from the economical point of view. In this study a spring from the two wheeler is taken for replacement. Glass fibres and carbon fibres are used for the manufacture of composite coil springs. The principle advantage of fibres reinforced polymer matrix composites for automobile parts is weight savings, part consolidation, and Investigation on the Feasibility of Composite Coil Spring for Automotive Applications D. Abdul Budan, T.S. Manjunatha improvement in NVH (noise, vibration and harshness). The absence of corrosion problems, which lowers maintenance cost for automobile parts, enables the use of fibres reinforced polymeric composite.

THERMAL ANALYSIS OF CYLINDRICAL PERFORATED FINS IN STAGGERED ARRANGEMENT BY CFD

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ABSTRACT

This project consist of Numerical and Computational Fluid dynamics analysis of heat transfer enhancement and the corresponding pressure drop on a flat surface equipped with cylindrical cross-sectional perforated and solid pin fins in a rectangular tunnel. The tunnel had a cross-sectional area of 250-100 mm². The experiments covered the following range: Reynolds number 13,500-43,500, the constant clearance ratio (C/H) = 0, the inter-fin spacing ratio (Sy/D) 1.944 and 3.417 for Staggered arrangement and Inline arrangement of fins. Nusselt number and Reynolds number are considered as performance parameters. Correlation equations are developed for the heat transfer and friction factor. Computational Fluid Dynamics analysis is performed by using ANSYS FLUENT 14.5 software. The Numerical and computational analysis shows that the use of the cylindrical perforated pin fins leads to heat transfer enhancement than the solid cylindrical fins. Heat transfer Enhancement varies depending on the inter-fin spacing ratio. Validation of Numerical and Computational Analysis is done.

Keywords: Heat Transfer¹, Cylindrical perforated Fins², Staggered Arrangement³, Inline Arrangement⁴.

1. INTRODUCTION

Extended surfaces, which are generally known as fins, are broadly used in air-cooled automobile engines and in air-cooled aircraft engines. Fins are also used in computer processors for cooling, and other electronic devices. Fins are used in the cooling of oil transport pipe line which runs several hundreds of miles. In different applications heat from the fins is dissipated by free as well as forced convection and radiation. Types of fins such as cylindrical, rectangular, square, annular and tapered or pin fins, to a combination of different geometries, have been used. These fins may manufactured from either a rectangular or cylindrical base. One of the commonly used heat exchanger fins is the pin fin. A pin fin is a cylinder or other shaped element attached perpendicular to a wall with the transfer fluid passing in cross flow over the element. Fins are basically used in the trailing edges of gas-turbine blades, in electronic cooling and in the aerospace industry. The height-to-diameter ratio (H/d) is of particular interest in heat-exchanger applications in which the attainment of a very high heat-transfer coefficient is of major concern. The fin height (H/d) affects the heat transfer of fins, and other affecting factors include the velocity of fluid flowing through channel, the thermal properties of the fluid, shape of the pin-fins like perforation, the relative inter-fin pitch, the arrangement of the pin-fins like inline, staggered arrangement and others. In existing studies, all the parameters affecting the heat transfer and pressure drop processes have not been investigated in detail, because it requires a vast number of experiments, which enormously increases the experimental cost and period. Therefore, the purpose of this study is to quantitative estimations of the various parameters affecting the performance of the cylindrical fins i.e. an optimization of design parameters for the perforated cylindrical pin fin.

2. LITERATURE SURVEY

There have been many investigation related to heat transfer and pressure drop of channel with pin fin was done by the following researchers considering the different factors for heat transfer



Google Scholar search results for "Green Structural Design of Building using Advance Energy Efficient Material".

Green Structural Design of Building using Advance Energy Efficient Material

Author: G.P. Sagar, Mahesh Kumar, D.K. Patel
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Build Green & Sustainable Smart Building	2017
COMPARATIVE STUDY OF AEC SOFTWARE IN ARCHITECTURAL SYSTEMS (I) (2017)	2017

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