

**Volume 4 Issue 1, June 2014**

**International Journal of Innovative  
Technology and Exploring Engineering**

**INDEXED**

**ISSN : 2278 - 3075**  
**Website: [www.ijitee.org](http://www.ijitee.org)**



**Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd.**

**Exploring Innovation: A Key for Dedicated Services**

**Address:**

# 22, First Floor, ShivLoke Phase-IV,  
Khajuri Kala, BHEL-Piplani, Bhopal (M.P.)-462021, India

**Website:** [www.blueeyesintelligence.org](http://www.blueeyesintelligence.org)

**Email:** [director@blueeyesintelligence.org](mailto:director@blueeyesintelligence.org), [blueeyes@gmail.com](mailto:blueeyes@gmail.com)

**Cell #:** +91-9669981618, **WhatsApp #:** +91-9669981618, **Viber #:** +91-9669981618

**Skype #:** beiesp, **Twitter #:** beiesp

## **Editor In Chief**

### **Dr. Shiv K Sahu**

Ph.D. (CSE), M.Tech. (IT, Honors), B.Tech. (IT)

Director, Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd., Bhopal(M.P.), India

### **Dr. Shachi Sahu**

Ph.D. (Chemistry), M.Sc. (Organic Chemistry)

Additional Director, Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd., Bhopal(M.P.), India

## **Vice Editor In Chief**

### **Dr. Vahid Nourani**

Professor, Faculty of Civil Engineering, University of Tabriz, Iran

### **Prof.(Dr.) Anuranjan Misra**

Professor & Head, Computer Science & Engineering and Information Technology & Engineering, Noida International University, Noida (U.P.), India

## **Chief Advisory Board**

### **Prof. (Dr.) Hamid Saremi**

Vice Chancellor of Islamic Azad University of Iran, Quchan Branch, Quchan-Iran

### **Dr. Uma Shanker**

Professor & Head, Department of Mathematics, CEC, Bilaspur(C.G.), India

### **Dr. Rama Shanker**

Professor & Head, Department of Statistics, Eritrea Institute of Technology, Asmara, Eritrea

### **Dr. Vinita Kumari**

Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd., India

### **Dr. Kapil Kumar Bansal**

Head (Research and Publication), SRM University, Gaziabad (U.P.), India

### **Dr. Deepak Garg**

Professor, Department of Computer Science and Engineering, Thapar University, Patiala (Punjab), India, Senior Member of IEEE, Secretary of IEEE Computer Society (Delhi Section), Life Member of Computer Society of India (CSI), Indian Society of Technical Education (ISTE), Indian Science Congress Association Kolkata.

### **Dr. Vijay Anant Athavale**

Director of SVS Group of Institutions, Mawana, Meerut (U.P.) India/ U.P. Technical University, India

### **Dr. T.C. Manjunath**

Principal & Professor, HKBK College of Engg, Nagawara, Arabic College Road, Bengaluru-560045, Karnataka, India

### **Dr. Kosta Yogeshwar Prasad**

Director, Technical Campus, Marwadi Education Foundation's Group of Institutions, Rajkot-Morbi Highway, Gauridada, Rajkot, Gujarat, India

### **Dr. Dinesh Varshney**

Director of College Development Counseling, Devi Ahilya University, Indore (M.P.), Professor, School of Physics, Devi Ahilya University, Indore (M.P.), and Regional Director, Madhya Pradesh Bhoj (Open) University, Indore (M.P.), India

### **Dr. P. Dananjayan**

Professor, Department of Department of ECE, Pondicherry Engineering College, Pondicherry, India

### **Dr. Sadhana Vishwakarma**

Associate Professor, Department of Engineering Chemistry, Technocrat Institute of Technology, Bhopal(M.P.), India

### **Dr. Kamal Mehta**

Associate Professor, Department of Computer Engineering, Institute of Technology, NIRMA University, Ahmedabad (Gujarat), India

### **Dr. CheeFai Tan**

Faculty of Mechanical Engineering, University Technical, Malaysia Melaka, Malaysia

### **Dr. Suresh Babu Perli**

Professor & Head, Department of Electrical and Electronic Engineering, Narasaraopeta Engineering College, Guntur, A.P., India

**Dr. Binod Kumar**

Associate Professor, School of Engineering and Computer Technology, Faculty of Integrative Sciences and Technology, Quest International University, Ipoh, Perak, Malaysia

**Dr. Chiladze George**

Professor, Faculty of Law, Akhaltsikhe State University, Tbilisi University, Georgia

**Dr. Kavita Khare**

Professor, Department of Electronics & Communication Engineering, MANIT, Bhopal (M.P.), INDIA

**Dr. C. Saravanan**

Associate Professor (System Manager) & Head, Computer Center, NIT, Durgapur, W.B. India

**Dr. S. Saravanan**

Professor, Department of Electrical and Electronics Engineering, Muthayamal Engineering College, Resipuram, Tamilnadu, India

**Dr. Amit Kumar Garg**

Professor & Head, Department of Electronics and Communication Engineering, Maharishi Markandeshwar University, Mullana, Ambala (Haryana), India

**Dr. T.C.Manjunath**

Principal & Professor, HKBK College of Engg, Nagawara, Arabic College Road, Bengaluru-560045, Karnataka, India

**Dr. P. Dananjayan**

Professor, Department of Department of ECE, Pondicherry Engineering College, Pondicherry, India

**Dr. Kamal K Mehta**

Associate Professor, Department of Computer Engineering, Institute of Technology, NIRMA University, Ahmedabad (Gujarat), India

**Dr. Rajiv Srivastava**

Director, Department of Computer Science & Engineering, Sagar Institute of Research & Technology, Bhopal (M.P.), India

**Dr. Chakunta Venkata Guru Rao**

Professor, Department of Computer Science & Engineering, SR Engineering College, Ananthasagar, Warangal, Andhra Pradesh, India

**Dr. Anuranjan Misra**

Professor, Department of Computer Science & Engineering, Bhagwant Institute of Technology, NH-24, Jindal Nagar, Ghaziabad, India

**Dr. Robert Brian Smith**

International Development Assistance Consultant, Department of AEC Consultants Pty Ltd, AEC Consultants Pty Ltd, Macquarie Centre, North Ryde, New South Wales, Australia

**Dr. Saber Mohamed Abd-Allah**

Associate Professor, Department of Biochemistry, Shanghai Institute of Biochemistry and Cell Biology, Yue Yang Road, Shanghai, China

**Dr. Himani Sharma**

Professor & Dean, Department of Electronics & Communication Engineering, MLR Institute of Technology, Laxman Reddy Avenue, Dundigal, Hyderabad, India

**Dr. Sahab Singh**

Associate Professor, Department of Management Studies, Dronacharya Group of Institutions, Knowledge Park-III, Greater Noida, India

**Dr. Umesh Kumar**

Principal: Govt Women Poly, Ranchi, India

**Dr. Syed Zaheer Hasan**

Scientist-G Petroleum Research Wing, Gujarat Energy Research and Management Institute, Energy Building, Pandit Deendayal Petroleum University Campus, Raisan, Gandhinagar-382007, Gujarat, India.

**Dr. Jaswant Singh Bhomrah**

Director, Department of Profit Oriented Technique, 1 – B Crystal Gold, Vijalpore Road, Navsari 396445, Gujarat. India

## **Technical Advisory Board**

### **Dr. Mohd. Husain**

Director MG Institute of Management & Technology, Banthara, Lucknow (U.P.), India

### **Dr. T. Jayanthi**

Principal, Panimalar Institute of Technology, Chennai (TN), India

### **Dr. Umesh A.S.**

Director, Technocrats Institute of Technology & Science, Bhopal(M.P.), India

### **Dr. B. Kanagasabapathi**

Infosys Labs, Infosys Limited, Center for Advance Modeling and Simulation, Infosys Labs, Infosys Limited, Electronics City, Bangalore, India

### **Dr. C.B. Gupta**

Professor, Department of Mathematics, Birla Institute of Technology & Sciences, Pilani (Rajasthan), India

### **Dr. Sunandan Bhunia**

Associate Professor & Head,, Dept. of Electronics & Communication Engineering, Haldia Institute of Technology, Haldia, West Bengal, India

### **Dr. Jaydeb Bhaumik**

Associate Professor, Dept. of Electronics & Communication Engineering, Haldia Institute of Technology, Haldia, West Bengal, India

### **Dr. Rajesh Das**

Associate Professor, School of Applied Sciences, Haldia Institute of Technology, Haldia, West Bengal, India

### **Dr. Mrutyunjaya Panda**

Professor & Head, Department of EEE, Gandhi Institute for Technological Development, Bhubaneswar, Odisha, India

### **Dr. Mohd. Nazri Ismail**

Associate Professor, Department of System and Networking, University of Kuala (UniKL), Kuala Lumpur, Malaysia

### **Dr. Haw Su Cheng**

Faculty of Information Technology, Multimedia University (MMU), Jalan Multimedia, 63100 Cyberjaya

### **Dr. Hossein Rajabalipour Cheshmehgaz**

Industrial Modeling and Computing Department, Faculty of Computer Science and Information Systems, Universiti Teknologi Malaysia (UTM) 81310, Skudai, Malaysia

### **Dr. Sudhinder Singh Chowhan**

Associate Professor, Institute of Management and Computer Science, NIMS University, Jaipur (Rajasthan), India

### **Dr. Neeta Sharma**

Professor & Head, Department of Communication Skills, Technocrat Institute of Technology, Bhopal(M.P.), India

### **Dr. Ashish Rastogi**

Associate Professor, Department of CSIT, Guru Ghansi Das University, Bilaspur (C.G.), India

### **Dr. Santosh Kumar Nanda**

Professor, Department of Computer Science and Engineering, Eastern Academy of Science and Technology (EAST), Khurda (Orisa), India

### **Dr. Hai Shanker Hota**

Associate Professor, Department of CSIT, Guru Ghansi Das University, Bilaspur (C.G.), India

### **Dr. Sunil Kumar Singla**

Professor, Department of Electrical and Instrumentation Engineering, Thapar University, Patiala (Punjab), India

### **Dr. A. K. Verma**

Professor, Department of Computer Science and Engineering, Thapar University, Patiala (Punjab), India

### **Dr. Durgesh Mishra**

Chairman, IEEE Computer Society Chapter Bombay Section, Chairman IEEE MP Subsection, Professor & Dean (R&D), Acropolis Institute of Technology, Indore (M.P.), India

### **Dr. Xiaoguang Yue**

Associate Professor, College of Computer and Information, Southwest Forestry University, Kunming (Yunnan), China

**Dr. Veronica Mc Gowan**

Associate Professor, Department of Computer and Business Information Systems, Delaware Valley College, Doylestown, PA, Allman China

**Dr. Mohd. Ali Hussain**

Professor, Department of Computer Science and Engineering, Sri Sai Madhavi Institute of Science & Technology, Rajahmundry (A.P.), India

**Dr. Mohd. Nazri Ismail**

Professor, System and Networking Department, Jalan Sultan Ismail, Kuala Lumpur, MALAYSIA

**Dr. Sunil Mishra**

Associate Professor, Department of Communication Skills (English), Dronacharya College of Engineering, Farrukhnagar, Gurgaon (Haryana), India

**Dr. Labib Francis Gergis Rofaiel**

Associate Professor, Department of Digital Communications and Electronics, Misr Academy for Engineering and Technology, Mansoura City, Egypt

**Dr. Pavol Tanuska**

Associate Professor, Department of Applied Informatics, Automation, and Mathematics, Trnava, Slovakia

**Dr. VS Giridhar Akula**

Professor, Avanthi's Research & Technological Academy, Gunthapally, Hyderabad, Andhra Pradesh, India

**Dr. S. Satyanarayana**

Associate Professor, Department of Computer Science and Engineering, KL University, Guntur, Andhra Pradesh, India

**Dr. Bhupendra Kumar Sharma**

Associate Professor, Department of Mathematics, KL University, BITS, Pilani, India

**Dr. Praveen Agarwal**

Associate Professor & Head, Department of Mathematics, Anand International College of Engineering, Jaipur (Rajasthan), India

**Dr. Manoj Kumar**

Professor, Department of Mathematics, Rashtriya Kishan Post Graduate Degree, College, Shamli, Prabudh Nagar, (U.P.), India

**Dr. Shaikh Abdul Hannan**

Associate Professor, Department of Computer Science, Vivekanand Arts Sardar Dalipsing Arts and Science College, Aurangabad (Maharashtra), India

**Dr. K.M. Pandey**

Professor, Department of Mechanical Engineering, National Institute of Technology, Silchar, India

**Prof. Pranav Parashar**

Technical Advisor, International Journal of Soft Computing and Engineering (IJSCE), Bhopal (M.P.), India

**Dr. Biswajit Chakraborty**

MECON Limited, Research and Development Division (A Govt. of India Enterprise), Ranchi-834002, Jharkhand, India

**Dr. D.V. Ashoka**

Professor & Head, Department of Information Science & Engineering, SJB Institute of Technology, Kengeri, Bangalore, India

**Dr. Sasidhar Babu Suvanam**

Professor & Academic Coordinator, Department of Computer Science & Engineering, Sree Narayana Gurukulam College of Engineering, Kadayiuruppu, Kolenchery, Kerala, India

**Dr. C. Venkatesh**

Professor & Dean, Faculty of Engineering, EBET Group of Institutions, Kangayam, Erode, Caimbatore (Tamil Nadu), India

**Dr. Nilay Khare**

Assoc. Professor & Head, Department of Computer Science, MANIT, Bhopal (M.P.), India

**Dr. Sandra De Iaco**

Professor, Dip.to Di Scienze Dell'Economia-Sez. Matematico-Statistica, Italy

**Dr. Yaduvir Singh**

Associate Professor, Department of Computer Science & Engineering, Ideal Institute of Technology, Govindpuram Ghaziabad, Lucknow (U.P.), India

**Dr. Angela Amphawan**

Head of Optical Technology, School of Computing, School Of Computing, Universiti Utara Malaysia, 06010 Sintok, Kedah, Malaysia

**Dr. Ashwini Kumar Arya**

Associate Professor, Department of Electronics & Communication Engineering, Faculty of Engineering and Technology, Graphic Era University, Dehradun (U.K.), India

**Dr. Yash Pal Singh**

Professor, Department of Electronics & Communication Engg, Director, KLS Institute Of Engg.& Technology, Director, KLSIET, Chandok, Bijnor, (U.P.), India

**Dr. Ashish Jain**

Associate Professor, Department of Computer Science & Engineering, Accurate Institute of Management & Technology, Gr. Noida (U.P.), India

**Dr. Abhay Saxena**

Associate Professor & Head, Department of Computer Science, Dev Sanskriti University, Haridwar, Uttrakhand, India

**Dr. Judy. M.V**

Associate Professor, Head of the Department CS &IT, Amrita School of Arts and Sciences, Amrita Vishwa Vidyapeetham, Brahmasthanam, Edapally, Cochin, Kerala, India

**Dr. Sangkyun Kim**

Professor, Department of Industrial Engineering, Kangwon National University, Hyoja 2 dong, Chunche0nsi, Gangwondo, Korea

**Dr. Sanjay M. Gulhane**

Professor, Department of Electronics & Telecommunication Engineering, Jawaharlal Darda Institute of Engineering & Technology, Yavatmal, Maharastra, India

**Dr. K.K. Thyagarajan**

Principal & Professor, Department of Informational Technology, RMK College of Engineering & Technology, RSM Nagar, Thiruyallur, Tamil Nadu, India

**Dr. P. Subashini**

Assoc. Professor, Department of Computer Science, Coimbatore, India

**Dr. G. Srinivasrao**

Professor, Department of Mechanical Engineering, RVR & JC, College of Engineering, Chowdavaram, Guntur, India

**Dr. Rajesh Verma**

Professor, Department of Computer Science & Engg. and Deptt. of Information Technology, Kurukshetra Institute of Technology & Management, Bhor Sadian, Pehowa, Kurukshetra (Haryana), India

**Dr. Pawan Kumar Shukla**

Associate Professor, Satya College of Engineering & Technology, Haryana, India

**Dr. U C Srivastava**

Associate Professor, Department of Applied Physics, Amity Institute of Applied Sciences, Amity University, Noida, India

**Dr. Reena Dadhich**

Prof. & Head, Department of Computer Science and Informatics, MBS MArg, Near Kabir Circle, University of Kota, Rajasthan, India

**Dr. Aashis. S. Roy**

Department of Materials Engineering, Indian Institute of Science, Bangalore Karnataka, India

**Dr. Sudhir Nigam**

Professor Department of Civil Engineering, Principal, Lakshmi Narain College of Technology and Science, Raisen, Road, Bhopal, (M.P.), India

**Dr. S. Senthil Kumar**

Doctorate, Department of Center for Advanced Image and Information Technology, Division of Computer Science and Engineering, Graduate School of Electronics and Information Engineering, Chon Buk National University Deok Jin-Dong, Jeonju, Chon Buk, 561-756, South Korea Tamilnadu, India

**Dr. Gufran Ahmad Ansari**

Associate Professor, Department of Information Technology, College of Computer, Qassim University, Al-Qassim, Kingdom of Saudi Arabia (KSA)

**Dr. R. Navaneetha krishnan**

Associate Professor, Department of MCA, Bharathiyar College of Engg & Tech, Karaikal Puducherry, India

**Dr. Hossein Rajabalipour Cheshmejjaz**

Industrial Modeling and Computing Department, Faculty of Computer Science and Information Systems, Universiti Teknologi Skudai, Malaysia

**Dr. Veronica McGowan**

Associate Professor, Department of Computer and Business Information Systems, Delaware Valley College, Doylestown, PA, Allman China

**Dr. Sanjay Sharma**

Associate Professor, Department of Mathematics, Bhilai Institute of Technology, Durg, Chhattisgarh, India

**Dr. Taghreed Hashim Al-Noor**

Professor, Department of Chemistry, Ibn-Al-Haitham Education for pure Science College, University of Baghdad, Iraq

**Dr. Madhumita Dash**

Professor, Department of Electronics & Telecommunication, Orissa Engineering College, Bhubaneswar, Odisha, India

**Dr. Anita Sagadevan Ethiraj**

Associate Professor, Department of Centre for Nanotechnology Research (CNR), School of Electronics Engineering (Sense), Vellore Institute of Technology (VIT) University, Tamilnadu, India

**Dr. Sibasis Acharya**

Project Consultant, Department of Metallurgy & Mineral Processing, Midas Tech International, 30 Mukin Street, Jindalee-4074, Queensland, Australia

**Dr. Neelam Ruhil**

Professor, Department of Electronics & Computer Engineering, Dronacharya College of Engineering, Gurgaon, Haryana, India

**Dr. Faizullah Mahar**

Professor, Department of Electrical Engineering, Balochistan University of Engineering and Technology, Pakistan

**Dr. K. Selvaraju**

Head, PG & Research, Department of Physics, Kandaswami Kandars College (Govt. Aided), Velur (PO), Namakkal DT. Tamil Nadu, India

**Dr. M. K. Bhanarkar**

Associate Professor, Department of Electronics, Shivaji University, Kolhapur, Maharashtra, India

**Dr. Sanjay Hari Sawant**

Professor, Department of Mechanical Engineering, Dr. J. J. Magdum College of Engineering, Jaysingpur, India

**Dr. Arindam Ghosal**

Professor, Department of Mechanical Engineering, Dronacharya Group of Institutions, B-27, Part-III, Knowledge Park, Greater Noida, India

**Dr. M. Chithirai Pon Selvan**

Associate Professor, Department of Mechanical Engineering, School of Engineering & Information Technology Manipal University, Dubai, UAE

**Dr. S. Sambhu Prasad**

Professor & Principal, Department of Mechanical Engineering, Pragati College of Engineering, Andhra Pradesh, India.

**Dr. Muhammad Attique Khan Shahid**

Professor of Physics & Chairman, Department of Physics, Advisor (SAAP) at Government Post Graduate College of Science, Faisalabad.

**Dr. Kuldeep Pareta**

Professor & Head, Department of Remote Sensing/GIS & NRM, B-30 Kailash Colony, New Delhi 110 048, India

**Dr. Th. Kiranbala Devi**

Associate Professor, Department of Civil Engineering, Manipur Institute of Technology, Takyelpat, Imphal, Manipur, India

**Dr. Nirmala Mungamuru**

Associate Professor, Department of Computing, School of Engineering, Adama Science and Technology University, Ethiopia

**Dr. Srilalitha Girija Kumari Sagi**

Associate Professor, Department of Management, Gandhi Institute of Technology and Management, India

**Dr. Vishnu Narayan Mishra**

Associate Professor, Department of Mathematics, Sardar Vallabhbhai National Institute of Technology, Ichchhanath Mahadev Dumas Road, Surat (Gujarat), India

**Dr. Yash Pal Singh**

Director/Principal, Somany (P.G.) Institute of Technology & Management, Garhi Bolni Road, Rewari Haryana, India.

**Dr. Sripada Rama Sree**

Vice Principal, Associate Professor, Department of Computer Science and Engineering, Aditya Engineering College, Surampalem, Andhra Pradesh. India.

**Dr. Rustom Mamlook**

Associate Professor, Department of Electrical and Computer Engineering, Dhofar University, Salalah, Oman. Middle East.

**Managing Editor**

**Mr. Jitendra Kumar Sen**

International Journal of Innovative Technology and Exploring Engineering (IJITEE)

**Editorial Board**

**Dr. Saeed Balochian**

Associate Professor, Gonaabad Branch, Islamic Azad University, Gonabad, Iratan

**Dr. Mongey Ram**

Associate Professor, Department of Mathematics, Graphics Era University, Dehradun, India

**Dr. Arupratan Santra**

Sr. Project Manager, Infosys Technologies Ltd, Hyderabad (A.P.)-500005, India

**Dr. Ashish Jolly**

Dean, Department of Computer Applications, Guru Nanak Khalsa Institute & Management Studies, Yamuna Nagar (Haryana), India

**Dr. Israel Gonzalez Carrasco**

Associate Professor, Department of Computer Science, Universidad Carlos III de Madrid, Leganes, Madrid, Spain

**Dr. Guoxiang Liu**

Member of IEEE, University of North Dakota, Grand Forks, N.D., USA

**Dr. Khushali Menaria**

Associate Professor, Department of Bio-Informatics, Maulana Azad National Institute of Technology (MANIT), Bhopal (M.P.), India

**Dr. R. Sukumar**

Professor, Sethu Institute of Technology, Pulloor, Kariapatti, Virudhunagar, Tamilnadu, India

**Dr. Cherouat Abel**

Professor, University of Technology of Troyes, France

**Dr. Rinkle Aggrawal**

Associate Professor, Department of Computer Science and Engineering, Thapar University, Patiala (Punjab), India

**Dr. Parteek Bhatia**

Associate Professor, Department of Computer Science & Engineering, Thapar University, Patiala (Punjab), India

**Dr. Manish Srivastava**

Professor & Head, Computer Science and Engineering, Guru Ghasidas Central University, Bilaspur (C.G.), India

**Dr. B. P. Ladgaonkar**

Assoc. Professor&Head, Department of Electronics, Shankarrao Mohite Mahavidyalaya, Akulj, Maharashtra, India

**Dr. E. Mohan**

Professor & Head, Department of Computer Science and Engineering, Pallavan College of Engineering, Kanchipuram, Tamilnadu, India

**Dr. M. Shanmuga Priya**

Assoc. Professor, Department of Biotechnology, MVJ College of Engineering, Bangalore Karnataka, India

**Dr. Leena Jain**

Assoc. Professor & Head, Dept. of Computer Applications, Global Institute of Management & Emerging Technologies, Amritsar, India

**Dr. S.S.S.V Gopala Raju**

Professor, Department of Civil Engineering, GITAM School of Technology, GITAM, University, Hyderabad, Andhra Pradesh, India

**Dr. Ani Grubisic**

Department of Computer Science, Teslina 12, 21000 split, Croatia

**Dr. Ashish Paul**

Associate Professor, Department of Basic Sciences (Mathematics), Assam Don Bosco University, Guwahati, India

**Dr. Sivakumar Durairaj**

Professor, Department of Civil Engineering, Vel Tech High Tech Dr.Rangarajan Dr.Sakunthala Engineering College, Avadi, Chennai Tamil Nadu, India

**Dr. Rashmi Nigam**

Associate Professor, Department of Applied Mathematics, UTI, RGPV, Airport Road, Bhopal, (M.P.), India

**Dr. Mu-Song Chen**

Associate Professor, Department of Electrical Engineering, Da-Yeh University, Rd., Dacun, Changhua 51591, Taiwan R.O.C., Taiwan, Republic of China

**Dr. Ramesh S**

Associate Professor, Department of Electronics & Communication Engineering, Dr. Ambedkar Institute of Technology, Bangalore, India

**Dr. Nor Hayati Abdul Hamid**

Associate Professor, Department of Civil Engineering, Universiti Teknologi Mara, Selangor, Malaysia

**Dr. C.Nagarajan**

Professor & Head, Department of Electrical & Electronic Engineering Muthayammal Engineering College, Rasipuram, Tamilnadu, India

**Dr. Ilaria Cacciotti**

Department of Industrial Engineering, University of Rome Tor Vergata Via del Politecnico Rome-Italy

**Dr. V.Balaji**

Principal Cum Professor, Department of EEE &E&I, Lord Ayyappa Institute of Engg & Tech, Uthukadu, Walajabad, Kanchipuram, Tamil Nadu, India

**Dr. G. Anjan Babu**

Assoc. Professor, Department of Computer Science, S V University, Tirupati, Andhra Pradesh, India

**Dr. Damodar Reddy Edla**

Assoc. Professor, Department of Computer Science & Engineering, National Institute of Technology, Goa, India

**Dr. D.Arumuga Perumal**

Professor, Department of Mechanical Engg, Noorul Islam University, Kanyakumari (Dist), Tamilnadu, India

**Dr. Roshdy A. AbdelRassoul**

Professor, Department of Electronics and Communications Engineering, Arab Academy for Science and Technology, Electronics and Communications Engineering Dept., POBox 1029, Abu-Qir, Alexandria, Egypt

**Dr. Aniruddha Bhattacharya**

Assoc. Professor & Head, Department of Computer Science & Engineering, Amrita School of Engineering, Bangalore, India

**Dr. P Venkateswara Rao**

Professor, Department of Mechanical Engineering, KITS, Warangal, Andhra Pradesh, India

**Dr. V.Mahalakshmi M.L**

Assoc. Professor & Head, Institute of Management Studies, Chennai CID Quarters, V.K.Iyer Road, Mandaveli, Chennai

S. No	<b>Volume-4 Issue-1, June 2014, ISSN: 2278-3075 (Online)</b> <b>Published By: Blue Eyes Intelligence Engineering &amp; Sciences Publication Pvt. Ltd.</b>		Page No.
1.	<b>Authors:</b>	<b>Mohamed DYABI, Abdelmajid HAJAMI, Hakim ALLALI</b>	
	<b>Paper Title:</b>	<b>CATP: An Enhanced MANETs Clustering Algorithm Based on Nodes Trusts and Performances</b>	
	<p><b>Abstract:</b> A mobile ad hoc network (MANET) is a wireless network without the support of any fixed infrastructure. Security is one of the main challenges in ad hoc network due to dynamic topology and mobility of nodes. Organizing mobile nodes into manageable clusters can limit the amount of secure routing information. Under a cluster structure, mobile nodes are managed by nodes called cluster heads. The cluster head role is resource consuming since it's always switched on and is responsible for the long-range transmission, for example to send a bit over 10 or 100 m distance, Manet's nodes consume resources that can perform thousands to millions of arithmetic operations. In this work, we present a clustering algorithm based on node trust and performances called (CATP) , where the clusters are formed around the trustworthy , the densest and the most powerful nodes.</p> <p><b>Keywords:</b> Adhoc, Clustering, OLSR, trust.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. <a href="http://www.ietf.org">http://www.ietf.org</a></li> <li>2. T. CLAUSEN ET P. JACQUET. Optimized Link State Routing Protocol (OLSR).<a href="http://www.ietf.org/rfc/rfc3626.txt">http://www.ietf.org/rfc/rfc3626.txt</a>,RFC 3626</li> <li>3. S. Sarkar, T. G. Basavaraju, and C. Puttamadappa, Ad Hoc Mobile Wireless Networks: Principles, Protocols and Applications New York: Auerbach Publications, 2007</li> <li>4. Anju Sharma, Shini Agarwal and Ravindra Singh Rathore "Cluster Based Routing in Mobile Ad hoc Wireless Networks Using Neuro-Genetic Paradigm", International Journal of Scientific &amp; Engineering Research Volume 3, Issue 7, July-2012</li> <li>5. Dr. Nasib Singh Gill, Swati Atri ,Jaideep Atri "Clustering Approach Based on ant Colony Optimization" International Journal of Advanced Research in Computer Science and Software Engineering , Volume 4, Issue 2, February 2014</li> <li>6. Hajami, K. Oudidi, M. Elkoutbi. "A Distributed Key Management Scheme based on Multi Hop Clustering Algorithm for MANET",IJCSNS International Journal of Computer Science and Network Security, VOL.10 No.2, February 2010</li> <li>7. Satu Elisa Virtanen and Pekka Nikander. Local clustering for hierarchical ad hoc networks. In Proceedings of WiOpt'04: Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks, pages 404–405, Los Alamitos, CA, USA, 2004.</li> <li>8. E. M. Belding-Royer, "Hierarchical Routing in Ad Hoc Mobile Networks," Wireless Commun. and Mobile Comp., vol. 2, no.5, 2002, pp. 515–32.</li> <li>9. Anju Sharma, Shini Agarwal and Ravindra Singh Rathore "Cluster Based Routing in Mobile Ad hoc Wireless Networks Using Neuro-Genetic Paradigm", International Journal of Scientific &amp; Engineering Research Volume 3, Issue 7, July-2012</li> <li>10. Er and W. Seah, "Mobility-based d-hop clustering algorithm for mobile ad hoc networks," in Wireless Communications and Networking Conference, 2004.</li> <li>11. Karamjeet Singh "energy efficiency in mobile ad -hoc networking using cluster head routing protocol" Vol. International Journal of Advanced Research in IT and Engineering 2 No. 5 May 2013</li> <li>12. M. L. Jiang, J. Y. Li, and Y. C. Tay, "Cluster Based Routing Protocol (CBRP) Functional Specification." draft-ietfmanet- cbrp-spec-01.txt, Aug. 1999.</li> <li>13. E. Baccelli. "OLSR Trees: A simple Clustering Mechanism for OLSR." Mediterranean Workshop on Ad-Hoc Networks (MED-HOC-NET), Porquerolles, France, June 2005.</li> <li>14. Y. Lacharite, M. Wang, P. Minet, T. Clausen. " Hierarchical OLSR " draft-lacharite-manet-holsr-02.txt July 13, 2009</li> <li>15. M. Gerla, J.T.C.Tsai, "Multicluster, mobile, multimediaradio network", Wireless Networks 1(3), pp. 255, 1995.</li> <li>16. Roy, B. (2005). An overview of MCDA techniques today: paradigms and challenges. In: Figueira, J., Greco, S. and Ehrgott, M. (eds) Multiple criteria decision analysis: state of the art surveys.</li> <li>17. Barron, F.H. 1992. Selecting a best multiattribute alternative with partial information about attribute weights.</li> <li>18. <a href="http://www.ncsu.edu/nrli/decision-making/MCDA.php">http://www.ncsu.edu/nrli/decision-making/MCDA.php</a></li> <li>19. Butler J, Olson DL. Comparison of centroid and simulation approaches for selection sensitivity analysis. Journal of Multi-Criteria Decision Analysis 1999;8:146–61.</li> <li>20. Jia J, Fischer GW, Dyer JS. Attribute weighting method and decision quality in the presence of response error: a simulation study. Journal of Behavioral Decision Making 1998;11:85–105.</li> <li>21. StillwellWG, Seaver DA, EdwardsW. A comparison of weight approximation techniques in multiattribute utility decision making. Organization Behavior and Human Decision Processes 1981;28:62–77.</li> <li>22. Network Simulator NS2 <a href="http://www.isi.edu/nsnam/ns/">http://www.isi.edu/nsnam/ns/</a></li> <li>23. Bidaki, Moazam; Masdari, Mohammad "Reputation-Based Clustering Algorithms in Mobile Ad Hoc Networks." International Journal of Advanced Science &amp; Technology . May2013, Vol. 54, p1-11</li> <li>24. Sohail Abbas "A Survey of Reputation Based Schemes for MANET" PGNNet 2010</li> <li>25. younghwan yoo and dharmap. agrawal "why does it pay to be selfish in a manet ? " iee wireless communications december 2006</li> <li>26. Yao Yu+, Lincong Zhang "A Secure Clustering Algorithm in Mobile Ad Hoc Networks" IPCSIT vol. 29 2012</li> </ol>		
2.	<b>Authors:</b>	<b>Mojtaba Atabakhsh, Mahmoud Ebadian, Majidreza Naseh</b>	
	<b>Paper Title:</b>	<b>Transient Stability Enhancement of Wind Farms using Flexible AC Transmission Technology (Comparison of SVC and STATCOM)</b>	
	<p><b>Abstract:</b> Uncontrollable nature of wind power causes using wind turbine induction generators. From the viewpoint of stability, induction generators consume reactive power similar to the induction motor, and it has a negative impact on short-term voltage stability and system voltage profile. This main issue of wind turbines that equipped with doubly fed induction generators (DFIGs) becomes bold in the grid faults. In this thesis, a new solution for uninterrupted operation of wind turbine driving a DFIG has been proposed during fault condition in the grid. A fault current limiter (FCL) is placed in series with the rotor circuit. During fault condition FCL enters a huge solenoid in the rotor circuit to inhibit increasing of current in the rotor circuit. When the fault is cleared the FCL bypasses the solenoid. A static synchronous compensator (STATCOM) and a static VAR compensator (SVC) have been applied for supplying required reactive power in faults and steady states. Capability and modeling accuracy of the proposed method confirmed with simulating a sample power system in MATLAB/Simulink software.</p> <p><b>Keywords:</b> FACTS, Wind power, Transient stability, Doubly fed induction generators, Power system.</p>		

	<p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Z. Saad-Saoud, M.L. Lisboa, J. B. Ekanayake, N. Jenkins, G. Strbac, "Applications of STATCOM to the Wind Farms", IEE Proc.-Gener. Transm. Distrib, Vol. 145, No. 5, September 1998, pp. 511-516.</li> <li>2. Chong Han; A.Q. Huang.; W. Litzemberger, L. Anderson, A. A. Edris, M. Baran; S. Bhattacharya; A. Johnson; "STATCOM Impact Study on the Integration of a Large Wind Farm into a Weak Loop Power System", IEEE Trans. On Energy Conversion, Digital Object Identifier 10.1109/TEC.2006.888031.</li> <li>3. M. Molinas, J. A. Suul, T. Undeland, "Wind farms with increased transient stability margin provided by a STATCOM", Proc. 2006 5th International Power Electronics and Motion Control Conference, Vol. 1, Aug 2006, pp. 1-7.</li> <li>4. Lie Xu, Liangzhong Yao, and Christian Sasse, "Comparison of Using SVC and STATCOM for Wind Farm Integration", Proc. 2006 International Conference on Power System Technology, Chongqing, China, Oct. 2006, pp. 1-7.</li> <li>5. Paulo Fischer de Toledo, Hailian Xie, "TOPIC 7: WIND FARM IN WEAK GRIDS COMPENSATED WITH STATCOM", Nordic PhD course on Wind Power, Smøla, Norway, June 5 - 11, 2005.</li> <li>6. Chen, Z.; Blaabjerg, Frede; Hu, Y; "Stability Improvement of Wind Turbine Systems by STATCOM", 2006 32nd IEEE Industrial Electronics, pp. 4213-4218.</li> <li>7. H. Gaztanaga, I. Etxeberria-Otadui, D. Ocnasu, S. Bacha, "Real-Time Analysis of the Transient Response Improvement of Fixed-Speed Wind Farms by Using a Reduced-Scale STATCOM Prototype", IEEE Trans. On Power Systems, Vol. 22, No. 2, May 2007, pp. 658-666.</li> <li>8. V. Akhmatov, H. Knudsen, A.H. Nielsen, J.K. Pedersen, and N.K. Poulsen, "A dynamic stability limit of grid-connected induction generators", Proc. International IASTED Conference on Power and Energy Systems, Marbella, Spain, September 2000.</li> <li>9. Divya, K.C.; Rao, P.S.N.; "Study of dynamic behavior of grid connected induction generators", 2004 IEEE Power Engineering General Meeting, Vol. 2, June 6-10, 2004, pp. 2200-2205.</li> <li>10. M. Steurer, J. Langston, S. Suryanarayanan, P. Ribeiro, R. Meeker, P. Sorensen, "Model Validation and Voltage Deviation Analysis of an Existing Wind Farm Using High Fidelity Real Time Digital Simulation", 19th International Conference on Electricity Distribution, Vienna, May 21-24, 2007.</li> <li>11. B. Chen, et. al., "Emitter turnoff (ETO) thyristor: an emerging, lower cost power semiconductor switch with improved performance for converterbased transmission controllers," in Proc. IEEE-IECON, pp. 662 – 667, Nov. 2005</li> <li>12. M. Steurer, "PEBB based High-Power Hardware-In-Loop Simulation Facility for Electric Power Systems ," in Proc. IEEE PES GM 2006, Montreal, Canada</li> <li>13. F. Peng, J. Lai, "Dynamic Performance and Control of a Static Var Generator Using Cascade Multilevel Inverters", IEEE Trans. On Industry Applications, Vol. 33, No. 3, May/June 1997, pp 748-755.</li> <li>14. Y. Liu, S. Bhattacharya, W. Song, A. Huang, "Control Strategy for Cascade Multilevel Inverter based STATCOM with Optimal Combination Modulation", 3rd SPEC Annual Power Electronics and Power System Seminar, Raleigh, NC, May 15, 2007.</li> <li>15. T. Ackermann, Wind Power in Power Systems, Wiley, 2005.</li> <li>16. Federal Energy Regulatory Commission, Interconnection for Wind Energy and Other Alternative Technologies, Jan 24, 2005, [Online] <a href="http://www.ferc.gov/whats-new/comm-meet/011905/E-1.pdf">http://www.ferc.gov/whats-new/comm-meet/011905/E-1.pdf</a>.</li> </ol>					
3.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;"><b>Authors:</b></td> <td><b>Aassia Mohammad Ali Jassim Al-a'Assam</b></td> </tr> <tr> <td><b>Paper Title:</b></td> <td><b>Design and Improvement the Performance of LTE Transceiver based OFDM Wavelet Signals and Turbo Coder</b></td> </tr> </table> <p><b>Abstract:</b> LTE, a term of Long Term Evolution, marketed as 4G LTE, is a standard for wireless communication of high-speed data for mobile phones and data terminals. It is based on the GSM/EDGE and UMTS/HSPA network technologies, increasing the capacity and speed using a different radio interface together with core network improvements. In this paper a new technique based on the Discrete Wavelet Transform (DWT) for implementing the OFDM in LTE is proposed. The proposed scheme is tested in different SUI channels. The results explain that the proposed system overcome the conventional method based on the Fast Fourier transform (FFT) and give lower BER compared with the conventional method based on FFT.</p> <p><b>Keywords:</b> Turbo Coder, LTE, 3GPP, OFDM, FFT, DWT, SUI.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. 3GPP releases. Retrieved June, 2008 from Available from World Wide Web <a href="http://www.3gpp.org/">http://www.3gpp.org/</a></li> <li>2. 3GPP TR 25.943 v6 .0.0(2004-12) , Technical report, 3rd generation Partnership Project, Technical specification group radio access network .Deployment aspects (Release 6).</li> <li>3. 3GPP TR 25.943 v5 1.0(2002-06) , Technical report, 3rd generation Partnership Project, Technical specification group radio access network Deployment aspects (Release 5).</li> <li>4. Rohde &amp; Schwarz: White Paper IMA169 "LTE-Advanced Technology Introduction".</li> <li>5. Tara Ali-Yahiya, "Understanding LTE and its Performance", Springer Science Business Media, ISBN 978-1-4419- 6456-4, 2011.</li> <li>6. Guangyi LIU, Jianhua ZHANG, Feng Jiang, and Weidong WANG, "Joint Spatial and Frequency ProportionalFairness Scheduling for MIMO OFDMA Downlink", International Conference on Wireless Communications, Networking and Mobile Computing, Wi-Com, IEEE Conference Publications, 2007.</li> <li>7. Samuel C. Yang, "OFDMA System Analysis and Design", ARTECH House, ISBN-13: 978-1-60807-076-3, 2010.</li> <li>8. JurajGazda, Peter Drot'ar, PavolGalajda, and Du'sankKocur, "Comparative evaluation of OFDMA and SC-FDMA based transmission systems", 8th IEEE International Symposium on Applied Machine Intelligence and Informatics, Harlan, Slovakia ,SAMI, 2010.</li> <li>9. Henrik Schulze, and Christian Luders, "Theory and Applications of OFDM and CDMA, Wideband WirelessCommunications", John Wiley &amp; Sons Ltd, ISBN-13 978-0-470-85069-5, 2005.</li> <li>10. P.Balasundaram, S.Nandakumar, J.Ajanthkumar, and K.G.Lingesh, "Radio Resource Management and InterferenceAnalysis for Downlink OFDMA in LTE", International Journal of Computer Applications (0975 – 8887), Volume 22– No.2, May 2011.</li> <li>11. G. Monghal, K. I. Pedersen, I. Z. Kovács, and P. E. Mogensen, "QoS Oriented Time and Frequency Domain Packet Schedulers for the UTRAN Long Term Evolution", IEEE Vehicular Technology Conference, VTC Spring 2008, Page(s): 2532 – 2536, 2008.</li> <li>12. 3GPP Technical Specification TS 36.420 "E-UTRAN; Physical channels and modulation", Version 1.0.0.</li> <li>13. Preben Mogensen, et al, "LTE Capacity compared to the Shannon Bound," IEEE 65th Vehicular Technology Conference, 2007. VTC2007-Spring. April 2007.</li> <li>14. Manish J. Manglani, "Wavelet Modulation in Gaussian and Rayleigh Fading Channels," Msc. Thesis, Faculty of the Virginia Polytechnic Institute and State University, July 2001.</li> <li>15. Jim Zyren ,Dr. Wes McCoy, Technical Editor, "Overview of the 3GPP Long Term. Evolution Physical Layer.," White Paper 3GPPEVOLUTIONWP, 07/2007.</li> <li>16. C. Berrou, A. Galvieux and P. Thitimajshima, "Near Shannon Limit Error-Correcting Coding and Decoding: Turbo Codes," Proceedings ICC 93, Geneva Switzerland, May 1993, pp. 1064-1070.</li> <li>17. Daniel S. Baum, Stanford University, Simulating the SUI Channel Models, 2001, IEEE.</li> </ol>	<b>Authors:</b>	<b>Aassia Mohammad Ali Jassim Al-a'Assam</b>	<b>Paper Title:</b>	<b>Design and Improvement the Performance of LTE Transceiver based OFDM Wavelet Signals and Turbo Coder</b>	<b>14-17</b>
<b>Authors:</b>	<b>Aassia Mohammad Ali Jassim Al-a'Assam</b>					
<b>Paper Title:</b>	<b>Design and Improvement the Performance of LTE Transceiver based OFDM Wavelet Signals and Turbo Coder</b>					
4.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;"><b>Authors:</b></td> <td><b>Makamure C, Chinofunga D, Usai T, Mutonhodza B</b></td> </tr> </table>	<b>Authors:</b>	<b>Makamure C, Chinofunga D, Usai T, Mutonhodza B</b>			
<b>Authors:</b>	<b>Makamure C, Chinofunga D, Usai T, Mutonhodza B</b>					

<b>Paper Title:</b>	<b>Determining the Efficacy of Protocols Employed in Replacement /Artificial Feeding using Commercial Infant Formula in, Harare Zimbabwe</b>
	<p><b>Abstract:</b> The study determined the efficacy of protocols employed in replacement/artificial feeding using commercial infant formula. The study was carried out in the different suburban locations of Harare, Zimbabwe. A sample size of 20 mothers/caregivers giving commercial infant formula to their babies at between 0-6 months was targeted; convenience and snowball sampling techniques were used to identify the participants. Interviews using a structured questionnaire were conducted and complemented by direct observation of the participants as they prepared the infant formula. The results were tallied against a checklist of recommended practices and label instructions. The results established that there were short falls in the preparation procedures as employed by the caregivers, mainly the mixing order of powder and water, temperature of the water for reconstitution and handling of left over formula after feed; 50 percent of caregivers were not adhering to the label instructions as given by the manufacturers and to recommendations proposed by World Health Organisation. Poor hand washing was indicative in 80 percent of cases, bottle feeding was predominant (n = 16) compared to cup feeding (n = 4) and the population practicing artificial feeding were mostly the young (90%), married (80%), educated (100%) and working group (90%). The researcher recommends that health providers strengthen efforts to ensure that adequate information /counselling and consistent advice of optimal benefit to the infant-mother pair be given and that the Ministry of Health and Child Welfare , Nutrition unit must strictly monitor the activities and the information given out by infant formula manufacturers as stipulated by the International Code of Marketing of Breastmilk Substitutes and also giving them the responsibility of following up on the appropriate use of their products.</p> <p><b>Keywords:</b> commercial infant formula, infants, caregivers.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Brown, R.E. (1973). Breastfeeding in Modern Times. American journal of clinical nutrition.</li> <li>2. Food and Agriculture Organization of the United Nations/World Health Organization. (2006).Enterobacter sakazakii and Salmonella in powdered infant formula. Microbiological Risk Assessment Series.</li> <li>3. Iversen, C, Forsythe S. (2004). Isolation of Enterobacter sakazakii and other Enterobacteriaceae from powdered infant formula milk and related products.</li> <li>4. Li Ma, Goudong Z, Balasbur S, Doyle &amp; Bowen, A. (2009). Efficacy of Protocols for Cleaning and Disinfecting Infant Feeding Bottles in Less Developed Communities. Atlanta: Center of Food Safety, University of Georgia.</li> <li>5. Riordan, J.M.1997).The Cost of not Breastfeeding: A commentary.</li> <li>6. U.S. Food and Drug Administration. What is an infant formula.</li> <li>7. UNICEF. (2010).The Community Infant and Young Child Feeding Counseling Package. Key messages booklet.</li> <li>8. UNICEF/WHO.2009.Baby Friendly Hospital Initiative, Revised Updated And Expanded For Integrated Care Manual. A 20hr course for maternity staff.</li> <li>9. WHO &amp; FAO. (2007).Guidelines for the safe preparation, storage and handling of powdered infant formula.</li> <li>10. WHO/UNICEF [United Nations Children's Fund]. (2003). The Global Strategy for Infant and Young Child Feeding.</li> </ol>
	<b>18-22</b>
<b>Authors:</b>	<b>Aamir Eftikhar Bondre, Meenakshi Ananth, Nishu Nandita, Sriragh Karat, Sadashiva V Chakrasali</b>
<b>Paper Title:</b>	<b>Comparative Analysis of Different Windowing Techniques in MFCC Speaker Recognition</b>
5.	<p><b>Abstract:</b> Speaker recognition is the process of automatically recognising the speaker on the basis of individual information included in speech waves. The objective of automatic speaker recognition is to extract, characterize and recognize the information about speaker identity. Speaker recognition technology can be used in many services such as voice dialling, banking by telephone, telephone shopping, database access services, information services, voice mail, security control for confidential information areas, and remote access to computers. Feature extraction is an important process in speaker recognition. In this paper Mel Frequency Cepstrum Coefficients method is used in order to design a text dependent speaker recognition system. Different types of windowing methods are used during feature extraction. In this paper, a comparative analysis of different windowing techniques is done in order to determine the most effective windowing technique for MFCC speaker recognition.</p> <p><b>Keywords:</b> Speaker, MFCC, Mel, Frequency, Cepstrum, Coefficients.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. K.K. Paliwal and B.S. Atal. "Frequency related representation of speech." in Proc. EUROSPEECH,p.p.65-68 Sep. (2003).</li> <li>2. Vibha Tiwari, "MFCC and its applications in speaker recognition" International Journal on Emerging Technologies ISSN : 0975-8364.</li> <li>3. T. Fukuda, M. Takigawa and T. Nitta, "Peripheral features for HMM based speech recognition" in Proc.ICASSP,1: 129-132(2001).</li> <li>4. M. Pandit and J. Kittler, "Feature selection for a dtw-based speaker verification system" Proceedings of IEEE Int.Conf. Acoust. And Signal Processing,2: 769-772 (1998).</li> <li>5. Dr. H.B. Kekre, Ms. Tanuja K. Sarode, "Vector Quantized Codebook Optimization using K-Means",International Journal on Computer Science and Engineering,Vol.1(3), 2009, 283-290.</li> <li>6. Darshan Mandalia and Pravin Gareta,"Speaker Recognition Using MFCC and Vector Quantization Model".</li> <li>7. Atal, B.S. and S.L. Hanauer,"Speech analysis and synthesis by linear prediction of the speech wave",Journal of the acoustical society of America,50: 637-655(1971)</li> <li>8. Speaker recognition using MFCC by S. Khan, Mohd Rafibul Islam, M. Faizul, D. Doll, IJCSSES (International Journal of Computer Science and Engineering System)2(1): 2008.</li> <li>9. Molau, S, Pitz, M, Schluter, R, and Ney, H., "Computing Mel frequency coefficients on Power Spectrum",Proceedings of IEEE ICASSP-2001,1: 73-76(2001).</li> <li>10. Lawrence Rabiner and Biing-Hwang Juang, Fundamentals of Speech Recognition Prentice-Hall, Englewood Cliffs, N.J.,(1993).</li> <li>11. Bhupinder Singh, Rupinder Kaur, Nidhi Devgun, Ramandeep Kaur,"The process of Feature Extraction in Automatic Speech Recognition System for Computer Machine Interaction with Humans: A Review",International Journal of Advanced Research in Computer Science and Software Engineering, Volume 2, Issue 2, February 2012 ISSN: 2277 128X</li> <li>12. Leigh D. Alsteris and Kuldip K. Paliwal,"Importance Of Window Shape For Phase-Only Reconstruction Of Speech",presented in International Conference on Acoustics,Speech and Signal Processing</li> <li>13. J.B. Allen and L.R. Rabiner," A unified approach to short time Fourier analysis and synthesis"Proc. IEEE, Vol. 65, No.11, pp. 1558 1564, 1977</li> </ol>
	<b>23-27</b>

	<p>14. Premakanthan and W.B. Mikhael, Speaker verification/ recognition and the importance of selective feature extraction: Review, Proceedings of the 44th IEEE 2001, Midwest Symposium, 1:14-17(2001).</p> <p>15. Goutam Saha and Malyaban Das, On Use of Singular Value Ratio Spectrum as Feature Extraction Tool in Speaker Recognition Application, CIT-2003, pp. 345-350, Bhubaneswar, Orissa, India, (2003).</p>	
6.	<p><b>Authors:</b> <b>Rajni B. Kinalkar, M.S. Harne</b></p> <p><b>Paper Title:</b> <b>A Review on Various Cooling System Employed in Grinding</b></p>	
	<p><b>Abstract:</b> Grinding is most commonly used as a finishing process to provide good surface, dimensional and geometrical quality. As thermal damage is one of the main limitations of grinding process. Cooling plays a crucial role in grinding to avoid thermal damage to the workpiece surface. Cooling and lubrication are especially important to ensure workpiece quality in grinding, because of high friction and intense heat generation involved in the process. This paper focused on Different approaches of cooling system as per the surface quality requirement for different types of material. Also it discusses the recent trends in cooling system.</p> <p><b>Keywords:</b> Grinding, Cooling system, Cryo grinding, Slotted grinding wheel, MQL, Hybrid MQL.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Z.W. Zhong, V.C. Venkatesh, Recent Developments in Grinding of Advanced Materials, International Journal of Advanced Manufacturing and Technology, 41(2009) 468-480.</li> <li>2. Snoeys, R., Maris, M., Peters, J., 1978, Thermally Induced Damage in Grinding, Annals of the CIRP, 27/2:571-581.</li> <li>3. Torrance, A. A., 1978, Metallurgical Effects Associated with Grinding, Proceedings of the 19th International Machine Tool Design and Research Conference, 637-644.</li> <li>4. Srivastava, A.K. et al. (1992). Surface finish in robotic disk grinding. International Journal of Machine Tools &amp; Manufacture, vol. 32, p. 269-297.</li> <li>5. Chen, X., Brian, W. (1996). Analysis and simulation of the grinding process, Part II: Mechanics of grinding. International Journal of Machine Tools &amp; Manufacture, vol. 36, p. 883-896.</li> <li>6. Srihari, G., Lal, G.K. (1994). Mechanics of vertical surface grinding. Journal of Materials Processing Technology, vol. 44, p. 14-28.</li> <li>7. Huang, L. et al. (1999). Effect of tool/chip contact length on orthogonal turning performance. Journal of Industrial Technology, vol. 15, p. 88-91.</li> <li>8. Anne Venu gopal, P.V.Rao, Selection of optimum conditions for maximum material removal rate with surface finish and damage as constraints in SiC grinding, International Journal of Machine Tools &amp; Manufacture 43 (2003) 1327-1336.</li> <li>9. [43] Tang, J. S., Pu, X. F., Xu, H. J., Zhang, Y. Z., 1990, Studies on Mechanisms and Improvement of Workpiece Burn during Grinding of Titanium Alloys, Annals of the CIRP, 39/1:353-356.</li> <li>10. 3] Tarasov, L. P., 1950, Some Metallurgical Aspects of Grinding, Machining Theory and Practice, ASM, 409-464.</li> <li>11. [44] Malkin, S., Cook, N. H., 1971, The Wear of Grinding Wheels, Part I, Attritious Wear, ASME Journal of Engineering for Industry, 93:1120-1128.</li> <li>12. Malkin, S., 1974, Thermal Aspects of Grinding, Part 2 - Surface Temperatures and Workpiece Burn, ASME Journal of Engineering for Industry, 96:184- 1191</li> <li>13. Fedoseev, O. B. and Malkin, S., 1991, Analysis of Tempering and Rehardening for Grinding of Hardened Steels. ASME Journal of Engineering for Industry, 113:388-394.</li> <li>14. Eda, H., Yamauchi, S., 1993, Computer Visual Simulation on Structural Changes of Steel in Grinding Process and Experimental Verification, Annals of the CIRP, 42/1:389-392.</li> <li>15. Anon, 1960, Grinding Stresses - Cause, Effect, and Control, Collected Papers, Grinding Wheel Institute, Cleveland, Ohio.</li> <li>16. Littman, W. E., 1967, Control of Residual Stresses in Metal Surfaces, Proceedings of the International Conference on Manufacturing Technology, ASTME, 1303-1317.</li> <li>17. Littman, W. E., 1967, The Influence of Grinding on Workpiece Quality, ASTME Paper MR67-593.</li> <li>18. Wakabayashi, M., Nakayama, M., 1979, Experimental Research on Elements Composing Residual Stresses in Surface Grinding, Bull. Japan Soc. Prec. Engg., 13:75.</li> <li>19. Hahn, R. S., 1976, On the Loss of Surface Integrity and Surface Form due to Thermoplastic Stress in Grinding Operations, Annals of the CIRP, 25/1:203-207.</li> <li>20. Lenning, R. L., 1968, Controlling Residual Stresses in Cylindrical Grinding, Abrasive Engineering, December: 24.</li> <li>21. Winter, P. M., McDonald, W. J., 1969, Biaxial Residual Surface Stresses from Grinding and Finish Machining 304 Stainless Steel Determined by a New Dissection Technique, ASME Journal of Basic Engineering, 91:15-23.</li> <li>22. Elliot S. Nachtman, Tower Oil &amp; Technology Company, Metal Cutting and Grinding Fluids, Volume 16 Machining, ASM handbook, 244-247</li> <li>23. S. PAUL and A. B. CHAITOPADHYAY , "A study of effects of cryo-cooling in grinding" , Int. J. Mach. Tools Manufact. Vol. 35, No. 1, pp. 109-117, 1995</li> <li>24. Jan C. Aurich and Benjamin Kirsch, "Improved coolant supply through slotted grinding wheel" , CIRP Annals - Manufacturing Technology 62 (2013) 363-366.</li> <li>25. Leonardo R. Silva et al. , "Environmentally friendly manufacturing: Behavior analysis of minimum quantity of lubricant - MQL in grinding process" , Journal of Cleaner Production January 2013</li> <li>26. R. Alberdi et.al. , "Strategies for optimal use of fluids in grinding" , International Journal of Machine Tools &amp; Manufacture 51 (2011) 491-499</li> <li>27. Eduardo Garcia et.al. , "Strategies for optimal use of fluids in grinding" , International Journal of Machine Tools &amp; Manufacture 51 (2011) 491-499</li> <li>28. Jan C. Aurich et.al, " Hydraulic design of a grinding wheel with an internal cooling lubricant supply" , Prod. Eng. Res. Devel. (2011) 5:119-126.</li> </ol>	28-35
7.	<p><b>Authors:</b> <b>Sabna Sharma, Ratika Pradhan</b></p> <p><b>Paper Title:</b> <b>Classification Methods for Land use and Land Cover Pattern Analysis</b></p> <p><b>Abstract:</b> The importance of mapping of land use and land cover is highlighted in this paper. The paper discusses image classification as one way of mapping land use and land cover. Image classification is the process of sorting all the pixels into in an image into a finite number of individual classes .Image classification is further classified into supervised and unsupervised classification. This paper also highlights the numerous ways for image classification.</p> <p><b>Keywords:</b> Image classification, Mapping, Supervised, Unsupervised..</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Mr. Anand Upadhyay, Dr. S. K. Singh, Dr. Varsha Turkar, 1 May 2014, Classification Of IRS LISS-III Image Using Artificial Neural</li> </ol>	36-38

	<p>Network, International Journal Of Pure And Applied Research In Engineering And Technology, Volume 2 (8), pp.100-108 .</p> <ol style="list-style-type: none"> <li>2. Haval M. SIDQI and Jamal F. KAKBRA, January – February 2014, Image Classification Using K-mean Algorithm, International Journal of Emerging Trends &amp; Technology in Computer Science (IJETCS), Volume 3, pp.38-42.</li> <li>3. Dr. C. Jothi Venkateswaran, R.Vijaya ,A.M.Saravanan, Jun-Jul 2013, A Fuzzy Based Approach to Classify Remotely Sensed Images, International Journal of Engineering and Technology, Vol 5 , pp.3051-3055.</li> <li>4. Shivakumar.B.R, Pallavi.M, June 2013, Fuzzy Logic Based RS Image Classification Using Maximum Likelihood and Mahalanobis Distance Classifiers, International Journal of Current Engineering and Technology, Vol.3, pp.378-382.</li> <li>5. Hayder Abd Al-Razzaq Abd, Husam Abdulrasool Alnajjar, June 2013, Maximum Likelihood for Land-Use/Land-Cover Mapping and Change Detection Using Landsat Satellite Images: A Case Study “South Of Johor”, International Journal of Computational Engineering Research, Volume-03, pp. 26-33.</li> <li>6. Vini Malik, Aakanksha Gautam, Aditi Sahai, Ambika Jha, Ankita Ramvir Singh, May 2013, Satellite Image Classification Using Fuzzy Logic, International Journal of Recet Technology and Engineering (IJRTE), Volume-2, pp.204-207.</li> <li>7. Manibhushan, Nilanchal Patel, Gadadhar Sahoo &amp; Anil Kumar Singh, 2013, Image Classification for Different Land Use and Land Covers Using Fuzzy Logic for the Improvement of Accuracies, Journal of Agricultural Science, Vol. 5, pp. 278-283.</li> <li>8. Ms.Chinki Chandhok, Mrs.Soni Chaturvedi, Dr.A. A Khurshid, August 2012, An Approach to Image Segmentation using K-means Clustering Algorithm, International Journal of Information Technology (IJIT), Volume – 1, pp.11-17.</li> <li>9. Asmala Ahmad and Shaun Quegan, August 2012, Analysis of Maximum Likelihood Classification on Multispectral Data, Applied Mathematical Sciences, Vol. 6, pp. 6425 – 6436.</li> <li>10. M.Renuka Devi, Dr.S. Santhosh Baboo, October 2011, Land use and Land Cover Classification using RGB&amp;L Based Supervised Classification Algorithm, International Journal of Computer Science &amp; Engineering Technology (IJCSET), Vol. 2 ,pp.167-180.</li> <li>11. P. Sathya and L. Malathi, October 2011, Classification and Segmentation in Satellite Imagery Using Back Propagation Algorithm of ANN and K-Means Algorithm, International Journal of Machine Learning and Computing, Vol. 1, pp. 422-426.</li> <li>12. B Sowmya and B Sheelarani, April 2011, Land cover classification using reformed fuzzy C-means, Indian Academy of Sciences, Vol. 36, pp.153-165.</li> <li>13. M. K. Ghose , Ratika Pradhan, Sucheta Sushan Ghose, November 2010, Decision Tree Classification of Remotely Sensed Satellite Data using Spectral Separability Matrix, International Journal of Advanced Computer Science and Applications, Vol. 1, pp.93-101.</li> <li>14. Navdeep Kaur Johal, Samandeep Singh ,Harish Kundra, September 2010, A hybrid FPAB/BBO Algorithm for Satellite Image Classification, International Journal of Computer Applications , Volume 6, pp. 31-36</li> <li>15. Anil Z Chitade, DR. S.K. Katiyar, 2010, Colour Based Image Segmentation using K-Means Clustering , International Journal of Engineering Science and Technology, Vol. 2(10) , pp.5319-5325.</li> <li>16. Nayak,S.,and Behera,M.D., june 2009,Improving land-Use and vegetation Cover Classification Accuracy using Fuzzy Logic-A Study in Pilibhit District,Uttar Pradesh,India, International Journal of Geoinformatics,Vol.5,pp.1-10 .</li> <li>17. Yusheng Shia, Jieying Xiaoc, Yanjun Shen, 2008, Landscape pattern change and associated environmental implication in Haihe River Basin, China, The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences. Vol. XXXVII, pp. 569-573.</li> <li>18. Mansoor D. Leh and Sreekala G. Bajwa, 2007, Land Use Change in NW Arkansas: Implications for Runoff Potential on the West Fork Watershed, IEEE, pp.419-423.</li> <li>19. I. Nedeljkovic ,2004 ,Image classification based on Fuzzy logic, The International Archives of the Photogrammetric, Remote Sensing and Spatial Information Sciences, Vol. 34, Part XXX.</li> </ol>													
8.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;"><b>Authors:</b></td> <td><b>Ronak Malpani, Sachith Kumar Jegarkal, Rashmi Shepur, Ravi Kiran H. N, Veena Kumara Adi</b></td> </tr> <tr> <td><b>Paper Title:</b></td> <td><b>Effect of Marble Sludge Powder and Quarry Rock Dust as Partial Replacement for Fine Aggregates on Properties of Concrete</b></td> </tr> <tr> <td colspan="2"><b>Abstract:</b> Concrete sustainability involves continuously choosing low impact building materials. Use of alternate aggregate materials has greater potential because 75% of concrete is composed of aggregates. The experimental study has been carried out to investigate the suitability of marble sludge powder and quarry rock dust as partial replacements for fine aggregates. This paper reports the properties of concrete mixtures where in a portion of sand is replaced by marble sludge powder and quarry rock dust and mixtures of both. During this experiment, the properties of concrete were studied for eight series of concrete mixtures by replacing the portion of fine aggregates by marble sludge and quarry rock dust and mixtures of both. The chemical composition and some of the mechanical properties of marble sludge powder and quarry rock dust are reported with that of sand. The effect of quarry rock dust and marble sludge powder on the compressive strength and split tensile strength were recorded at the curing age of 7 and 28 days. All the data are tabulated and compared. It was observed that particular proportions of marble sludge powder and quarry rock dust displayed enhancing effect on the compressive strength.</td> </tr> <tr> <td colspan="2"><b>Keywords:</b> marble sludge powder, quarry rock dust, workability, compressive strength, split strength.</td> </tr> <tr> <td colspan="2"><b>References:</b></td> </tr> <tr> <td colspan="2"> <ol style="list-style-type: none"> <li>1. Ilangovan R, Mahendran N and Nagamani K (2008), "Strength and durability properties of concrete containing quarry rock dust as fine aggregates", ARPN Journal of Engineering and Applied Science, Vol.3(5), pp.20-26.</li> <li>2. Prof. Veena G. Pathan1, Prof. Md. Gulfam Pathan2, Feasibility and Need of use of Waste Marble Powder in Concrete Production IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE) e-ISSN: 2278-1684, p-ISSN: 2320-334X PP 23-26</li> <li>3. Corinaldesi V., Moriconi, G. and Naik T.R. 20075. Characterization of Marble Dust for its use in Mortar and Concrete. CANMET/ACI Three day International Symposium on Sustainable development of Cement and Concrete, October 5-7, Toronto, Canada.</li> <li>4. Wu K, Chen B, Yao W, Zhang D (2001). Effect of coarse aggregate type on mechanical properties of high-performance concrete. Cem. Conc.Res., 31(10): 1421-1425.</li> <li>5. Nisnevich M. Sirotin G. and Eshel Y. 2003. Light weight concrete containing thermal power station and stone quarry waste. Magazine of Concrete Research. pp. 313-320.</li> <li>6. Hudson B.P. 1997. Manufactured sand for Concrete. The Indian Concrete Journal. pp. 237-240.</li> <li>7. Ilangovan R. and Nagamani K. 2006. Application of quarry Rock dust as fine aggregate in concrete construction. National Journal on construction Management: NICMR. Pune. December. pp. 5-13.</li> <li>8. Babu K. K., Radhakrishnan R. and Nambiar E. K. K. 1997. Compressive strength of Brick Masonary with Alternative-Aggregate Mortar. CE and CR journal, New Delhi. Pp. 25-29.</li> <li>9. Ms. Monica C. Dhoka. "Green Concrete: Using Industrial Waste of Marble Powder, Quarry Dust and Paper Pulp" International Journal of Engineering Science Invention ISSN (Online): 2319 – 6734, ISSN (Print): 2319 – 6726 Volume 2 Issue 10  October 2013   PP.67-70</li> <li>10. Joseph O. Ukpata, Maurice E. Ephraim and Godwin A. Akeke, Pg.No. 81 to 92, Compressive strength of concrete using lateritic sand and quarry dust as fine aggregates ARPN Journal of Engineering and Applied Science, Vol.7, No.1, January 2012.</li> </ol> </td> </tr> </table>	<b>Authors:</b>	<b>Ronak Malpani, Sachith Kumar Jegarkal, Rashmi Shepur, Ravi Kiran H. N, Veena Kumara Adi</b>	<b>Paper Title:</b>	<b>Effect of Marble Sludge Powder and Quarry Rock Dust as Partial Replacement for Fine Aggregates on Properties of Concrete</b>	<b>Abstract:</b> Concrete sustainability involves continuously choosing low impact building materials. Use of alternate aggregate materials has greater potential because 75% of concrete is composed of aggregates. The experimental study has been carried out to investigate the suitability of marble sludge powder and quarry rock dust as partial replacements for fine aggregates. This paper reports the properties of concrete mixtures where in a portion of sand is replaced by marble sludge powder and quarry rock dust and mixtures of both. During this experiment, the properties of concrete were studied for eight series of concrete mixtures by replacing the portion of fine aggregates by marble sludge and quarry rock dust and mixtures of both. The chemical composition and some of the mechanical properties of marble sludge powder and quarry rock dust are reported with that of sand. The effect of quarry rock dust and marble sludge powder on the compressive strength and split tensile strength were recorded at the curing age of 7 and 28 days. All the data are tabulated and compared. It was observed that particular proportions of marble sludge powder and quarry rock dust displayed enhancing effect on the compressive strength.		<b>Keywords:</b> marble sludge powder, quarry rock dust, workability, compressive strength, split strength.		<b>References:</b>		<ol style="list-style-type: none"> <li>1. Ilangovan R, Mahendran N and Nagamani K (2008), "Strength and durability properties of concrete containing quarry rock dust as fine aggregates", ARPN Journal of Engineering and Applied Science, Vol.3(5), pp.20-26.</li> <li>2. Prof. Veena G. Pathan1, Prof. Md. Gulfam Pathan2, Feasibility and Need of use of Waste Marble Powder in Concrete Production IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE) e-ISSN: 2278-1684, p-ISSN: 2320-334X PP 23-26</li> <li>3. Corinaldesi V., Moriconi, G. and Naik T.R. 20075. Characterization of Marble Dust for its use in Mortar and Concrete. CANMET/ACI Three day International Symposium on Sustainable development of Cement and Concrete, October 5-7, Toronto, Canada.</li> <li>4. Wu K, Chen B, Yao W, Zhang D (2001). Effect of coarse aggregate type on mechanical properties of high-performance concrete. Cem. Conc.Res., 31(10): 1421-1425.</li> <li>5. Nisnevich M. Sirotin G. and Eshel Y. 2003. Light weight concrete containing thermal power station and stone quarry waste. Magazine of Concrete Research. pp. 313-320.</li> <li>6. Hudson B.P. 1997. Manufactured sand for Concrete. The Indian Concrete Journal. pp. 237-240.</li> <li>7. Ilangovan R. and Nagamani K. 2006. Application of quarry Rock dust as fine aggregate in concrete construction. National Journal on construction Management: NICMR. Pune. December. pp. 5-13.</li> <li>8. Babu K. K., Radhakrishnan R. and Nambiar E. K. K. 1997. Compressive strength of Brick Masonary with Alternative-Aggregate Mortar. CE and CR journal, New Delhi. Pp. 25-29.</li> <li>9. Ms. Monica C. Dhoka. "Green Concrete: Using Industrial Waste of Marble Powder, Quarry Dust and Paper Pulp" International Journal of Engineering Science Invention ISSN (Online): 2319 – 6734, ISSN (Print): 2319 – 6726 Volume 2 Issue 10  October 2013   PP.67-70</li> <li>10. Joseph O. Ukpata, Maurice E. Ephraim and Godwin A. Akeke, Pg.No. 81 to 92, Compressive strength of concrete using lateritic sand and quarry dust as fine aggregates ARPN Journal of Engineering and Applied Science, Vol.7, No.1, January 2012.</li> </ol>		39-42
<b>Authors:</b>	<b>Ronak Malpani, Sachith Kumar Jegarkal, Rashmi Shepur, Ravi Kiran H. N, Veena Kumara Adi</b>													
<b>Paper Title:</b>	<b>Effect of Marble Sludge Powder and Quarry Rock Dust as Partial Replacement for Fine Aggregates on Properties of Concrete</b>													
<b>Abstract:</b> Concrete sustainability involves continuously choosing low impact building materials. Use of alternate aggregate materials has greater potential because 75% of concrete is composed of aggregates. The experimental study has been carried out to investigate the suitability of marble sludge powder and quarry rock dust as partial replacements for fine aggregates. This paper reports the properties of concrete mixtures where in a portion of sand is replaced by marble sludge powder and quarry rock dust and mixtures of both. During this experiment, the properties of concrete were studied for eight series of concrete mixtures by replacing the portion of fine aggregates by marble sludge and quarry rock dust and mixtures of both. The chemical composition and some of the mechanical properties of marble sludge powder and quarry rock dust are reported with that of sand. The effect of quarry rock dust and marble sludge powder on the compressive strength and split tensile strength were recorded at the curing age of 7 and 28 days. All the data are tabulated and compared. It was observed that particular proportions of marble sludge powder and quarry rock dust displayed enhancing effect on the compressive strength.														
<b>Keywords:</b> marble sludge powder, quarry rock dust, workability, compressive strength, split strength.														
<b>References:</b>														
<ol style="list-style-type: none"> <li>1. Ilangovan R, Mahendran N and Nagamani K (2008), "Strength and durability properties of concrete containing quarry rock dust as fine aggregates", ARPN Journal of Engineering and Applied Science, Vol.3(5), pp.20-26.</li> <li>2. Prof. Veena G. Pathan1, Prof. Md. Gulfam Pathan2, Feasibility and Need of use of Waste Marble Powder in Concrete Production IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE) e-ISSN: 2278-1684, p-ISSN: 2320-334X PP 23-26</li> <li>3. Corinaldesi V., Moriconi, G. and Naik T.R. 20075. Characterization of Marble Dust for its use in Mortar and Concrete. CANMET/ACI Three day International Symposium on Sustainable development of Cement and Concrete, October 5-7, Toronto, Canada.</li> <li>4. Wu K, Chen B, Yao W, Zhang D (2001). Effect of coarse aggregate type on mechanical properties of high-performance concrete. Cem. Conc.Res., 31(10): 1421-1425.</li> <li>5. Nisnevich M. Sirotin G. and Eshel Y. 2003. Light weight concrete containing thermal power station and stone quarry waste. Magazine of Concrete Research. pp. 313-320.</li> <li>6. Hudson B.P. 1997. Manufactured sand for Concrete. The Indian Concrete Journal. pp. 237-240.</li> <li>7. Ilangovan R. and Nagamani K. 2006. Application of quarry Rock dust as fine aggregate in concrete construction. National Journal on construction Management: NICMR. Pune. December. pp. 5-13.</li> <li>8. Babu K. K., Radhakrishnan R. and Nambiar E. K. K. 1997. Compressive strength of Brick Masonary with Alternative-Aggregate Mortar. CE and CR journal, New Delhi. Pp. 25-29.</li> <li>9. Ms. Monica C. Dhoka. "Green Concrete: Using Industrial Waste of Marble Powder, Quarry Dust and Paper Pulp" International Journal of Engineering Science Invention ISSN (Online): 2319 – 6734, ISSN (Print): 2319 – 6726 Volume 2 Issue 10  October 2013   PP.67-70</li> <li>10. Joseph O. Ukpata, Maurice E. Ephraim and Godwin A. Akeke, Pg.No. 81 to 92, Compressive strength of concrete using lateritic sand and quarry dust as fine aggregates ARPN Journal of Engineering and Applied Science, Vol.7, No.1, January 2012.</li> </ol>														
9.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;"><b>Authors:</b></td> <td><b>Poonam M. Baikar</b></td> </tr> <tr> <td><b>Paper Title:</b></td> <td><b>Design of PID Controller based Information Collecting Robot in Agricultural Field</b></td> </tr> <tr> <td colspan="2"><b>Abstract:</b> This project presents a design of a PID algorithm for driving agricultural robot motors. This approach</td> </tr> </table>	<b>Authors:</b>	<b>Poonam M. Baikar</b>	<b>Paper Title:</b>	<b>Design of PID Controller based Information Collecting Robot in Agricultural Field</b>	<b>Abstract:</b> This project presents a design of a PID algorithm for driving agricultural robot motors. This approach		43-47						
<b>Authors:</b>	<b>Poonam M. Baikar</b>													
<b>Paper Title:</b>	<b>Design of PID Controller based Information Collecting Robot in Agricultural Field</b>													
<b>Abstract:</b> This project presents a design of a PID algorithm for driving agricultural robot motors. This approach														

	<p>has been proved with MATLAB simulation results. This kind of position control can be improved using adaptive algorithm. This project also described implementation of PID using PWM method. The robot prototype can move rapidly with the controller. Based on the study, the accuracy of the moving velocity of the robot can be further improved, such as the use of artificial neural networks and genetic algorithms for precise speed control. The results obtained from the PID simulation in MATLAB-Simulink shows that PID algorithm gives considerable precision in positioning compared to conventional motor control algorithms.</p> <p><b>Keywords:</b> PID, PWM, MATLAB</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Naiqian Zhang, Maohua Wang, Ning Wang. Precision agriculture-a worldwide overview, Computers and Electronics in Agriculture, 36(2002)113-132.</li> <li>2. Hui Fang, Yong He. A Pocket PG based field information fast collection system, Computers and Electronics in Agriculture, 61(2008)254-260.</li> <li>3. Y Nagasaka, Q Zhang, T.E.Grifft, etal. Control System Design for an Autonomous Field Watching-dog Robot. Technology for Off-Road Equipment, Proceedings of the 7-8 October 2004 Conference, Kyoto, Japan.</li> <li>4. Bak, T. and H.Jakobsen.2004.Agricultural robotic platform with four wheel steering for weed detection. Biosystems Engineering, 87(2):125-136.</li> <li>5. Blas M. Vinagre, Concepción A. and Monje etc. Fractional PID Controllers for Industry Application- a Brief Introduction. Journal of Vibration and Control, 2007, 7(13):1419-1429.</li> </ol>					
10.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;"><b>Authors:</b></td> <td><b>Niharika Mehta, Romika Choudhary</b></td> </tr> <tr> <td><b>Paper Title:</b></td> <td><b>Direction of Arrival Estimation on the Performance of WCMSR Technique</b></td> </tr> </table> <p><b>Abstract:</b> This paper presents direction-of-arrival (DOA) estimation of wideband signals, and wideband covariance matrix sparse representation (W-CMSR) method is proposed. In W-CMSR, covariance matrix is taken such that the lower left triangular elements are aligned to form a new measurement vector. In W-CMSR technique we use constraint of sparsity, sparse representations are those representations that account for most or all information of a signal with a linear combination of a small number of elementary signals called atoms. Often the atoms are chosen from a so called over-complete dictionary. It means that given a signal firstly we form the dictionary which contains the atoms that represent the signal and then after that we find the smallest set of atoms from the dictionary to represent the signal. No prior information of the incident signal is required in W-CMSR, and no decomposition is done. Half-wavelength spacing restriction can be changed from the highest to the lowest frequency of the incident wideband signals.</p> <p><b>Keywords:</b> Direction-of-arrival (DOA) estimation, over complete representation, sparse representation, wideband signal, source localization.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. J. G. Proakis, Digital Communications, 4th ed. New York: McGraw- Hill, 2001.</li> <li>2. H. Wang and M. Kaveh, "Coherent signal-subspace processing for the detection and estimation of angles of arrival of multiple wideband sources," IEEE Trans. Acoust., Speech, Signal Process., vol. ASSP-33, no. 4, pp. 823–831, Aug. 1985.</li> <li>3. Z. M. Liu, Z. T. Huang, and Y. Y. Zhou, "Source number detection and direction estimation via sparsity-inducing representation of the array covariance matrix," IEEE Trans. Aerosp. Electron. Syst., to be published.</li> <li>4. Sandeep Santosh, O. P. Sahu, Monika Aggarwal, "An Overview of Different Wideband Direction of Arrival (DOA) Estimation Methods" WSEAS TRANSACTIONS ON</li> <li>5. SIGNAL PROCESSING Volume 5,2009, Print ISSN:1790-5052, E-ISSN: 2224-3488.</li> <li>6. Y. S. Yoon, L. M. Kaplan, and J. H. McClellan, "TOPS: New DOA estimator for wideband signals," IEEE Trans. Signal Process., vol. 54, no. 6, pp. 1977–1988, Jun. 2006.</li> <li>7. H. Krim and M. Viberg, "Two decades of array signal processing research: The parametric approach," IEEE Signal Process. Mag., vol. 13, no. 4, pp. 67–94, Jul. 1996.</li> <li>8. D. Malioutov, M. Cetin, and A. S. Willsky, "A sparse signal reconstruction perspective for source localization with sensor arrays," IEEE Trans. Signal Process., vol. 53, no. 8, pp. 3010–3022, Aug. 2005.</li> <li>9. M. M. Hyder and K. Mahata, "A robust algorithm for joint-sparse recovery," IEEE Signal Process. Lett., vol. 16, no. 12, pp. 1091–1094, Dec. 2009.</li> <li>10. S. Ejaz and M. A. Shaq, "Comparison of spectral and subspace algorithms for FM source estimation" Progress In Electromagnetics Research C, Vol. 14, 2010.</li> <li>11. J. S. Sturm, Using SeDuMi 1.02, A Matlab Toolbox for Optimization Over Symmetric Cones. Tilburg, The Netherlands, Dept. Econometrics, Tiburg Univ., 2010 [Online]. Available: <a href="http://fewcal.kub.nl/~strum">http://fewcal.kub.nl/~strum</a>.</li> <li>12. J. A. Tropp and S. J. Wright, "Computational methods for sparse solution of linear inverse problems," Proc. IEEE, vol. 98, no. 6, pp. 948–958, Jun. 2010.</li> <li>13. Zhang-Meng Liu, Zhi-Tao Huang, and Yi-Yu Zhou, "Direction-of-Arrival Estimation of Wideband Signals via Covariance Matrix Sparse Representation" IEEE Transactions on signal processing, Vol. 59, No. 9, September 2011.</li> </ol>	<b>Authors:</b>	<b>Niharika Mehta, Romika Choudhary</b>	<b>Paper Title:</b>	<b>Direction of Arrival Estimation on the Performance of WCMSR Technique</b>	48-51
<b>Authors:</b>	<b>Niharika Mehta, Romika Choudhary</b>					
<b>Paper Title:</b>	<b>Direction of Arrival Estimation on the Performance of WCMSR Technique</b>					
11.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;"><b>Authors:</b></td> <td><b>Boussaa Mohamed, Bennis Abdelattif, Atibi Mohamed</b></td> </tr> <tr> <td><b>Paper Title:</b></td> <td><b>Comparison Between Two Hardware Implementations of a Formal Neuron on FPGA Platform</b></td> </tr> </table> <p><b>Abstract:</b> The formal neuron is equivalent to a simple processor that performs a series of mathematical operations more or less complex on real data. The chosen representation to encode these data is the 32 bits floating point representation; this makes possible to achieve satisfactory precision in calculation. This paper presents a hardware comparison between two formal neurons, one is associated with the sigmoid activation function and the other to the gaussian activation function. This comparison is designed firstly to compare the hardware results obtained respectively from these two implementations with software results, and secondly, to make comparison between the two hardware implementations in terms of the consumed material resources and execution time. These neurons are implemented by using a number of specific blocks called megafunction, on an FPGA platform of Altera DE2-70 which offers several advantages, including flexibility, efficiency and speed.</p>	<b>Authors:</b>	<b>Boussaa Mohamed, Bennis Abdelattif, Atibi Mohamed</b>	<b>Paper Title:</b>	<b>Comparison Between Two Hardware Implementations of a Formal Neuron on FPGA Platform</b>	52-56
<b>Authors:</b>	<b>Boussaa Mohamed, Bennis Abdelattif, Atibi Mohamed</b>					
<b>Paper Title:</b>	<b>Comparison Between Two Hardware Implementations of a Formal Neuron on FPGA Platform</b>					

	<p><b>Keywords:</b> formal neuron, FPGA, hardware resources, execution time, mega function.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Lin, C. J., &amp; Lee, C. Y. (2011). Implementation of a neuro-fuzzy network with on-chip learning and its applications. <i>Expert Systems with Applications</i>, 38(1), 673-681.</li> <li>2. Shao, X., &amp; Sun, D. (2007). Development of a new robot controller architecture with FPGA-based IC design for improved high-speed performance. <i>Industrial Informatics</i>, IEEE Transactions on, 3(4), 312-321.</li> <li>3. Bruti-Liberati, N., Martini, F., Piccardi, M., &amp; Platen, E. (2008). A hardware generator of multi-point distributed random numbers for Monte Carlo simulation. <i>Mathematics and Computers in Simulation</i>, 77(1), 45-56.</li> <li>4. Salewski, F., &amp; Kowalewski, S. (2008). Hardware/software design considerations for automotive embedded systems. <i>Industrial Informatics</i>, IEEE Transactions on, 4(3), 156-163.</li> <li>5. Bueno, E. J., Hernandez, A., Rodriguez, F. J., Girón, C., Mateos, R., &amp; Cobreces, S. (2009). A DSP-and FPGA-based industrial control with high-speed communication interfaces for grid converters applied to distributed power generation systems. <i>Industrial Electronics</i>, IEEE Transactions on, 56(3), 654-669.</li> <li>6. Savich, A. W., Moussa, M., &amp; Areibi, S. (2007). The impact of arithmetic representation on implementing MLP-BP on FPGAs: A study. <i>Neural Networks</i>, IEEE Transactions on, 18(1), 240-252.</li> <li>7. El Moukhlis, S., Elrharras, A., &amp; Hamdoun, A. FPGA-Based Handwritten Signature Recognition System. <i>International Journal of Innovative Technology and Exploring Engineering (IJITEE)</i> ISSN: 2278-3075, Volume-3, Issue-11, April 2014</li> <li>8. Wolf, D. F., Romero, R. A., &amp; Marques, E. D. U. A. R. D. O. (2001, November). Using embedded processors in hardware models of artificial neural networks. In <i>V Simposio Brasileiro de automação inteligente</i>, Brazil.</li> <li>9. Bosque, G., del Campo, I., &amp; Echanobe, J. (2014). Fuzzy systems, neural networks and neuro-fuzzy systems: A vision on their hardware implementation and platforms over two decades. <i>Engineering Applications of Artificial Intelligence</i>.</li> <li>10. Rostro-Gonzalez, H., Cessac, B., Girau, B., &amp; Torres-Huitzil, C. (2011). The role of the asymptotic dynamics in the design of FPGA-based hardware implementations of gIF-type neural networks. <i>Journal of Physiology-Paris</i>, 105(1), 91-97.</li> <li>11. Tisan, A., &amp; Cirstea, M. (2013). SOM neural network design—A new Simulink library based approach targeting FPGA implementation. <i>Mathematics and Computers in Simulation</i>, 91, 134-149.</li> <li>12. Online in: <a href="http://www.altera.com">http://www.altera.com</a>.</li> </ol>	
	<p><b>Authors:</b> Vishvender Singh, Gunjan Agarwal, Mukesh Sharma</p>	
	<p><b>Paper Title:</b> Design and Analysis of Low Offset High Speed Low Power 1Kb SRAM Memory</p>	
12.	<p><b>Abstract:</b> This paper we present the design and analysis of 1Kb Static Random Access Memory (SRAM) at 180nm technology and main focusing on optimizing power consumption and delay factors are improved by varying the size of transistor used in Sense Amplifier. The present 1kb SRAM can be divided into main three block sense amplifier, basic cell and precharged circuit. Present 1kb SRAM design input decoupled sense amplifier. Presented Sense amplifier CMOS schematic is design tanner EDA S-edit, Simulate T-spice and 0.18µm technology.</p> <p><b>Keywords:</b> Sense amplifier, Driver transistor, Access transistor, load transistor.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Adel S. Sedra and Kenneth C. Smith, "Microelectronics Circuits" Oxford University Press International Edition, New York, 5th Edition 2006.</li> <li>2. Ardalan, S.; Chen, D.; Sachdev, M.; Kennings, A.; "Current mode sense amplifier" <i>Circuits and Systems</i>, 2005. 48th Midwest Symposium Vol. 1, 7-10 Aug. 2005 Page(s):17 – 20.</li> <li>3. Himanshu, "Design of a low power and high speed sense amplifier", Master thesis, Thapar University, 2010.</li> <li>4. Hwang-Cherng Chow, Shu-Hsien Chang; "high performance sense amplifier circuit for low power SRAM APPLICATION S: Circuits and Systems", 2005. 48th Midwest Symposium Vol. 1, 7-10 Aug. 2005 Page(s):17 – 20.</li> <li>5. Tegze P. Haraszti, Microcirc Associates "CMOS Memory Circuits", kluwer academic publishers New York, boston, dordrecht, London, Moscow. Pages 238-239.</li> <li>6. Chun-Lung Hsu; Mean-Horn Ho; "High-speed sense amplifier for SRAM applications" Volume 1, 6-9 Dec. 2004 Page(s):577 – 580</li> <li>7. H. Mahmoodi, S. Mukhopadhyay, and K. Roy, "Estimation of delay variations due to random-dopant fluctuations in nanoscale CMOS circuits," <i>IEEE J. Solid-State Circuits</i>, vol. 40, pp. 1787-1796, Sept. 2005</li> <li>8. E. Seevinck et al., "Current-Mode Techniques for High-Speed VLSI Circuits with Application to Current Sense Amplifier for CMOS SRAM," <i>IEEE JSSC</i>, vol. 26, no.4, pp. 525-536, 1991.</li> <li>9. Singh, R.; Bhat, N., "An offset compensation technique for latch type sense amplifiers in high-speed low-power SRAMs" Volume 2000, paper 11.3.4, p. 12, Issue 6, June 2004 Page(s):652 – 657..</li> <li>10. J. Bhavnagarwala, X. Tang, and J. D. Meindl, "The impact of intrinsic device fluctuations on CMOS SRAM cell stability" <i>IEEE J. Solid-State Circuits</i>, vol. 36, pp. 658–665, Apr. 2001 .</li> <li>11. Ardalan, S.; Chen, D.; Sachdev, M.; Kennings, A.; "Current mode sense amplifier" <i>Circuits and Systems</i>, 2005. 48th Midwest Symposium Vol. 1, 7-10 Aug. 2005 Page(s):17 – 20</li> <li>12. R. Sarpeshkar, J.L. Wyatt, N.C. Lu, and P.D. Gerber, "Analysis of Mismatch Sensitivity in a Simultaneously Latched CMOS Sense Amplifier", <i>IEEE Trans. on Circuits and Systems-II</i>, Vol. 39, No.5, May 1992.</li> <li>13. Agarwal, B. Paul, S. Mukhopadhyay, and K. Roy, "Process variation in embedded memories: Failure analysis and variation aware architecture", <i>IEEE J. Solid-State Circuits</i>, vol. 40, pp. 1804-1813, 2005.</li> <li>14. Kiyoo Itoh, "VLSI Memory Chip Design" Springer-Verlag Berlin Heidelberg New York, p.p. 110, 2001.</li> <li>15. Ying-Chuan Liu, Hung-Yu Wang, Yuan-Long Jeang and Yu-Wei Huang, "A CMOS Current Mirror with Enhanced Input Dynamic Range", 3rd International Conference on Innovative Computing Information and Control (ICIC'08), 2008.</li> <li>16. R. Menchaca, and H. Mahmoodi, "Impact of transistor aging effects on sense amplifier reliability in nano-scale CMOS," in 13rd International Symposium on Quality Electronic Design, pp. 342-6, 2012.</li> <li>17. Sreerama Reddy G M and P Chandrasekhara Reddy, "Design and Implementation of 8K-bits Low Power SRAM in 180nm Technology", Proceedings of the International Multi Conference of Engineers and Compute Scientists 2009 Vol. II IMECS2009, March -20, 2009, Hong Kong.</li> <li>18. Kiyoo Itoh, "VLSI Memory Chip Design" Springer-Verlag Berlin Heidelberg New York, p.p. 110, 2001</li> <li>19. Andrei Pavlov and Manoj Sachdev, "CMOS SRAM Circuit Design and Parametric Test in Nano-Scale Technologies", 2008 Springer Science Business Media B.V. ISBN 978-1-4020-8362-4 e-ISBN 978-1-4020-8363-1.</li> </ol>	57-61