

Volume 1 Issue 1, June 2012

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

IJITEE

ISSN : 2278 - 3075

Website: www.ijitee.org



Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd.

Exploring Innovation: A Key for Dedicated Services

Address:

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

Website: www.blueeyesintelligence.org

Email: director@blueeyesintelligence.org, 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, Gauridad, 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, Deptment 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 Giriya 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, Akluj, 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	Volume-1 Issue-1, June 2012, ISSN: 2278-3075 (Online) Published By: Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd.		Page No.
1.	Authors:	Chirag Sharma, Sandeep Kaur	
	Paper Title:	Behavior Analysis of Semantic Data Models	
	Abstract: There are many traditional models of database present now a days in the form of Hierarchical model, Network Model, Relational model. Since they offer many advantages in terms of data integrity, data storage and retrieval but there is a big disadvantage as compared to latest introduced database models i.e semantic models such as Sembase, SAM, RM/T. Our paper presents many disadvantages of Conventional or Traditional Database Models as compared to Semantic models and try to find the efficient solution of these disadvantages. This paper also presents performance evaluation factors of different semantic models.		1-3
	Keywords: Database, Database models Traditional Models, Semantic Expressiveness, Abstraction, Objects, Normalization.		
	References: 1. Chaudhary Sankhyanan, Chaki Nabendu, Bhattacharya Swapan, "New Graph Based Data Model using Functional Abstraction", JCST, vol-21 (3), Pp 430-438, May 2006. 2. Boyed Saurabh, "A Semantic Database Management System: SIM", University of Texas, Computer Science Honors, 2003. 3. Prabhu C.S.R., "Object-Oriented Database Systems Approaches and Architectures", Third Edition, PHI learning Private Limited, 2011. 4. Hammer Michael, Mcleaoed Dennis, "Database Description with SDM: A Semantic Database Model", ACM Transactions on Database Systems, Vol 6(3), September 1981. 5. Hull Richard, King Roger, "Semantic Database Modeling", Survey, Applications and Research Issue, ACM Computing Surveys, Vol 19 (3), Pp-201-261, September 1987. 6. Tujarov Hristo, Mihailov Ivelin, "PER Model-Semantic Data Models Developing", International Conference on Computer Systems and Technologies-CompSysTech, 2004.		
2.	Authors:	Neelam R. Prakash, Dilip Kumar, Tejender Sheoran	
	Paper Title:	Microcontroller Based Closed Loop Automatic Irrigation System	
	Abstract: In last few decades, electronics and communication have become an integral part of our lives, always expanding into new realms, to provide ways to do things in precise manner. With the recent developments in wireless networks especially regarding power requirements and cost, it has become possible to conceive a comprehensive model for precision agriculture. In this paper we present a closed loop automatic irrigation system along with the temperature and water usage monitoring. The system can be used in greenhouses as well as open fields. The real time values of soil moisture, temperature (useful in greenhouse cultivation) are wirelessly transmitted using Zigbee technology from field to substation which controls the state of the motor and irrigation valves according to the desired moisture levels set by the user. A flow sensor is also interfaced to the main water supply which continuously tracks the water applied to the field. All the information viz. temperature, current soil moisture level in field, upper and lower moisture levels to be maintained in field (set by user), motor status, water usage and flow rate are displayed on LCD.		4-6
	Keywords: Automatic irrigation, Zigbee, closed loop, Wireless, Precision agriculture.		
	References: 1. Cha'vez, J. L., Pierce, F. J., Elliott, T. V., Evans, R. G., Kim, Y., & Iversen, W. M. (2009). "A remote irrigation monitoring and control system (RIMCS) for continuous move systems. Part A: Field testing and results", Precision agriculture Precision Agriculture, 11, 1-10. doi: 10.1007/s11119-009-9109-1. 2. Mahir Dursun and Semih Ozden (2011). "A wireless application of drip irrigation automation supported by soil moisture sensors", Scientific Research and Essays Vol. 6(7), pp. 1573-1582, 4 April, 2011. 3. V.I. Adamchuk, J.W. Hummel, M.T. Morgan and S.K. Upadhyaya (2004). "On the-go soil sensors for precision agriculture", Computers and Electronics in Agriculture, 44, (2004), 71-91. 4. Yandong Zhao, Jinfeng Guan, Junfu Zhang and Weilun Yin (2009). "Study on Precision Water-saving Irrigation Automatic Control System by Plant Physiology", IEEE 2009. 5. Fedro S. Zazueta, Allen G. Smajstrla and Gary A. Clark (1993). "Irrigation System Controllers", SSAGE 22, Agricultural and Biological Engineering Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Available: http://edis.ifas.ufl.edu . 6. G.K. Banerjee and Rahul Singhal (2010). "Microcontroller based Polyhouse Automation Controller", 2010 International Symposium on Electronic System Design, IEEE 2010. 7. McCann, I.R., D.C. Kincaid, and D.Wang. 1992. Operational characteristics of the Watermark Model 200 soil water potential sensor for irrigation management. Appl. Eng. Agric. 8:603-609. 8. Watermark 200SS soil moisture sensor specification manual. Available: http://www.irrometer.com/sensors.html 9. Shock, C.C., J.M. Barnum, and M. Seddigh (1998). "Calibration of Watermark Soil Moisture Sensors for irrigation management", pp. 139-146 in Proceedings of the International Irrigation Show, Irrigation Association, San Diego, CA. 10. DS18S20 1-Wire Parasite-Power Digital Thermometer datasheet. Available: http://www.maximic.com/datasheet/index.mvp/id/2815 11. Flow sensor specification manual, Available: http://www.digisavant.com/Spec/FS-4400H-Spec.pdf		
3.	Authors:	Brijesh Shah, Akshaya Patel, Satish Shah	
	Paper Title:	Implementation of Image Segmentation on Digital Images Using Modified Otsu Algorithm	
	Abstract: The first step in image analysis is segment the image. Segmentation subdivides an image into its constituent regions or objects. Among all Segmentation Techniques, the Thresholding methods are widely used because of their advantages of simple implement and time saving. Thresholding method is based on a threshold value. The key of this method is to select the threshold value. An Otsu method is one of the superior threshold selection methods. Image segmentation based on Otsu's method and modified Otsu algorithms are thoroughly		7-9

	<p>presented in the paper.</p> <p>Keywords: Image segmentation, Threshold selection, Histogram, Otsu's method.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Yi Wan, Jiangchang Wang, Xingbo Sun, Ming Hao, A Modified Otsu Image Segment Method Based on the Rayleigh Distribution. Sichuan University of Science&Engineering Dept. of Electronic Engineering Zigong, Sichuan 643000, P. R. China. 2. Otsu N,A thresholding selection method from gray-level histograms [J]IEEE Trans System Man Cybernetic.1979, pp.62-66. 3. Liu Jian-zhuang,Li Wen-qing.The automatic thresholding of graylevel pictures via two-dimensional Otsu method[J].Acta Automatica Sinica.1993,19(1),pp.101-105. 4. Guo Hai-tao, Wang Lianyu and Tian tan etal. Automatic Thresholding Using the Otsu Algorithm Based on the two-dimensional Bound Histogram. Journal of Optoelectronics Laser. Jun. 2005, v 16, n 6, pp. 739-743 5. Yang Bo. Image Segmentation of the Genetic Algorithms on the Base of Otsu. Journal Nature Science Hunan Normal University. Mar. 2003, v 26, n 1, pp. 32- 38 6. Ping-Sung Liao and Tse-Sheng Chen and Pau-Choo Chung (2001). "A Fast Algorithm for Multilevel Thresholding". J. Inf. Sci. Eng. 17 (5): 713-727 7. Sang Uk Lee. Comparative performance study of several global thresholding techniques for segmentation. Computer Vision, Graphics And Image Processing. Nov. 1990, v 52, n 2, p 171-190 					
4.	<table border="1"> <tr> <td>Authors:</td> <td>Rekha Rani, Sukhbir Singh, Amit Malik</td> </tr> <tr> <td>Paper Title:</td> <td>Image Denoising Using Hybrid Filter</td> </tr> </table> <p>Abstract: Image Processing is the vast area in the field of research. There are various techniques used to remove Present noise. This paper represents obstacles related with image during transmission. The salt & pepper noise, Gaussian noise, impulse noise, Rayleigh noise are the such type of noise that are produced during transmission. Noise arises due to various factors like bit error rate, speed, dead pixels. The images become blurred due to camera movements, object movement or displacement of pixels. This paper deals with removal of combination of Gaussian noise, Rayleigh noise, impulse noise and blurredness, salt and pepper noise simultaneously from the image. The hybrid filter is such a tool that makes it successful to remove these noise form images and provide clarity to picture while preserving its details.</p> <p>Keywords: PSNR, bit-rate, MSE, Weiner Filter, Multi adaptive filter, Median filter.</p> <p>References:</p> <ol style="list-style-type: none"> A. K. Jain, "Fundamentals of digital Image Processing", Englewood Cliff, N.J.: Prentice Hall, 1989. 1. R. C. Gonzalez and R.E. Woods, Digital Image Processing, Addison-Wesley, Longman Inc., 2000. 2. Leslie Stroebel and Richard D. Zakia, "The Focal encyclopedia of photography". Focal Press, 1995. 3. Gonzalez C. Rafael, Woods E. Richard, "Digital Image Processing" , Dorling Kinderslet,3rd edition, 2009. 4. Wikipedia, " http://en.wikipedia.org/wiki/Gaussian_noise", July 2009. 5. Shi Zhong, "Image Denoising using Wavelet Thresholding and Model Selection",International Conference on Image Processing, 2000, Vancouver, BC, Canada, Volume: 3, 10- 13 Sept. 2000 Pages: 262-265. 6. http://en.wikipedia.org/wiki/Peak_signal-to-noise_ratio 7. http://www.kxcad.net/cae_MATLAB/toolbox/images/f16-14527.htm 	Authors:	Rekha Rani, Sukhbir Singh, Amit Malik	Paper Title:	Image Denoising Using Hybrid Filter	10-13
Authors:	Rekha Rani, Sukhbir Singh, Amit Malik					
Paper Title:	Image Denoising Using Hybrid Filter					
5.	<table border="1"> <tr> <td>Authors:</td> <td>Neelam Tyagi, Simple Sharma</td> </tr> <tr> <td>Paper Title:</td> <td>Comparative study of various Page Ranking Algorithms in Web Structure Mining (WSM)</td> </tr> </table> <p>Abstract: As the web is escalating day by day, so people rely on the search engines to investigate the web. In this situation, the challenge for website owner is to provide relevant information to the users as per their needs and fulfill their requirements. The famous search engine Google used Hyperlink structure for ranking the web pages. There are various ranking algorithms are present for getting the desired result. The paper refers a preface to Web mining then trying to explain detailed Web Structure mining, and supply the link evaluation algorithms brought into play by the Web. This paper also explores different PageRank algorithms and compares those algorithms used for Information Retrieval. In Web Mining, the essentials of Web mining and the Web mining categories are explained. Different Page Ranking algorithms like PageRank (PR), WPR (Weighted PageRank), HITS (Hyperlink- Induced Topic Search) algorithms are discussed and comparison of these algorithms in context of performance has been carried out. PageRanks are designed for PageRank and Weighted PageRank algorithm for a agreed hyperlink composition.</p> <p>Keywords: HITS, PageRank, Weighted PageRank, Web Structure.</p> <p>References:</p> <ol style="list-style-type: none"> 1. M. G. da Gomes Jr. and Z.Gong, "Web Structure Mining: An Introduction", Proceedings of the IEEE International Conference on Information Acquisition, 2005. 2. Naresh Barsagade, "Web Usage Mining And Pattern Discovery: A Survey Paper", CSE 8331, Dec.8,2003. 3. N. Duhan, A. K. Sharma and K. K. Bhatia, "Page Ranking Algorithms: A Survey", Proceedings of the IEEE International Conference on Advance Computing, 2009. 4. Cooley, R, Mobasher, B., Srivastava, J."Web Mining: Information and pattern discovery on the World Wide Web". In proceedings of the 9th IEEE International Conference on tools with Artificial Intelligence (ICTAI' 97).Newposrt Beach,CA 1997. 5. R. Kosala, H. Blockeel, "Web Mining Research: A Survey", SIGKDD Explorations, Newsletter of the ACM Special Interest Group on Knowledge Discovery and Data Mining Vol. 2, No. 1 pp 1-15, 2000. 6. P Ravi Kumar, and Singh Ashutosh kumar, "Web Structure Mining Exploring Hyperlinks and Algorithms for Information Retrieval", American Journal of applied sciences, 7 (6) 840-845 2010. 7. S. Brin, and L. Page, "The Anatomy of a Large Scale Hypertextual Web Search Engine", Computer Network and ISDN Systems, Vol. 30, Issue 1-7, pp. 107-117, 1998. 8. Wenpu Xing and Ali Ghorbani, "Weighted PageRank Algorithm", Proceedings of the Second Annual Conference on Communication Networks and Services Research (CNSR '04), IEEE, 2004. 9. J. Kleinberg, "Authoritative Sources in a Hyper-Linked Environment", Journal of the ACM 46(5), pp. 604-632,1999. 10. S. Chakrabarti, B. Dom, D. Gibson, J. Kleinberg, R. Kumar, P.Raghavan, S. Rajagopalan, A. Tomkins, "Mining the Link Structure of the 	Authors:	Neelam Tyagi, Simple Sharma	Paper Title:	Comparative study of various Page Ranking Algorithms in Web Structure Mining (WSM)	14-19
Authors:	Neelam Tyagi, Simple Sharma					
Paper Title:	Comparative study of various Page Ranking Algorithms in Web Structure Mining (WSM)					

	World Wide Web", IEEE Computer Society Press, Vol 32, Issue 8 pp. 60 – 67, 1999.	
	11. D. Cohn and H. Chang, "Learning to probabilistically identify Authoritative Documents". In Proceedings of 17th International Conf. on Machine Learning, pages 167-174. Morgan Kaufmann, San Francisco, CA, 2000.	
	12. Saeko Nomura, Tetsuo Hayamizu, "Analysis and Improvement of HITS Algorithm for Detecting Web Communities".	
	13. Longzhuang Li, Yi Shang, and Wei Zhang, "Improvement of HITS- based Algorithms on Web Documents", WWW2002, May 7-11, 2002, Honolulu, Hawaii, USA. ACM 1-58113-449-5/02/0005.	
	14. J. Kleinberg, "Hubs, Authorities and Communities", ACM Computing Surveys, 31(4), 1999.	
	Authors: Akhilesh Gannavarapu, Vatte Suresh	
	Paper Title: Decoding Quadrature Signals using AT90CAN128	
6.	<p>Abstract: A code is written for decoding the quadrature signals from the rotary encoder, to get a pulse train along with direction signal, which shows one transition period, and the direction of the rotation, whether in clockwise or anti clockwise directions respectively. It is especially important for machines in Industries which have to monitor the transition periods, or for machines used for Image Processing. Using AVR Studio 4, and AVR GCC, a C code for decoding the quadrature signals is being presented, which gives the pulse for one cycle and the direction in which the encoder is being rotated. With a change in direction, there is a change in the direction pulse, and the pulse indicates the completion of one transition cycle. It is explained in detail in the documentation.</p> <p>Keywords: Quadrature decoder, AVR Studio v. 4.18, AVR GCC, transition state</p> <p>References:</p> <p>1. Data Sheet of AVR AT90CAN128</p>	20-23
	Authors: Mamta Dhanda, Parul Gupta	
	Paper Title: Software Enabled Load Balancer by Introducing the Concept of Sub Servers	
7.	<p>Abstract: In computer networking, load balancing is a technique to spread work between two or more computers, network links, CPUs, hard drives, or other resources, in order to get optimal resource utilization, maximize throughput, and minimize response time. Using multiple components with load balancing, instead of a single component, may increase reliability through redundancy. The balancing service is usually provided by a dedicated program or hardware device (such as a multilayer switch). One of the most common applications of load balancing is to provide a single Internet service from multiple servers, sometimes known as a server farm. Commonly load-balanced systems include popular web sites, large Internet Relay Chat networks, high-bandwidth File Transfer Protocol sites, NNTP servers and DNS servers. The load balancing system is a set of substitute buffer to share the server load, when their load exceeds its limit. The proposed technique gives an effective way to overcome the load balancing problem. Serving to more number of client requests is the main aim of every web server, but due to some unexpected load, the server performance may degrade. In this paper we propose a software enabled load balancing model by introducing the concept of sub servers for regional services to overcome the overhead of the main server.</p> <p>Keywords: FTP, NNTP Servers, DNS Servers, SLB</p> <p>References:</p> <p>1. G. Huang, W. Wang, T. Liu, H. Mei, "Simulation-based analysis of middleware service impact on system reliability: Experiment on Java application server", Journal of Systems and Software, Volume 84, Issue 7, Pages 1160-1170, ISSN 0164-1212, July 2011.</p> <p>2. J. Guitart, D. Carrera, V. Beltran, J. Torres, E. Ayguade, "Designing an overload control strategy for secure e-commerce applications", Computer Networks, Volume 51, Issue 15, 24, Pages 4492-4510, October 2007.</p> <p>3. K. Birman, R. van Renesse, W. Vogels, "Adding high availability and autonomic behavior to Web services," Software Engineering, 2004.ICSE 2004. Proceedings. 26th International Conference on , vol., no., pp. 17- 26, 23-28 May 2004.</p> <p>4. Guruge, Java and Web Services, Web Services, Digital Press, Burlington, 2004, Pages 227-270, ISBN 978-1-55-558282-1, DOI:10.1016/B978-1-55558282-1/50008-7.</p> <p>5. H. Xiaotao, D. Chaozhi, "Design of high-available architecture for distributed application based on J2EE and its analysis[JA]. Huazhong Keji Daxue Xuebao (Ziran Kexue Ban)/Journal of Huazhong University of Science and Technology (Natural Science Edition).2005,44-47.</p> <p>6. Y. Liu, L. Wang, S. Li, "Research on self-adaptive load balancing in EJB clustering system," Intelligent System and Knowledge Engineering, 2008. ISKE 2008. 3rd International Conference on , vol.1, no., pp.1388-1392, 17-19 Nov. 2008.</p> <p>7. T. Bourke, T. Server Load Balancing. O'Reilly & Associates Press. 2001.</p> <p>8. V.Viswanathan. Load Balancing Web Applications. OnJava.com.2001. http://onjava.com/pub/a/onjava/2001/09/26/loa_d.html</p> <p>9. G. Lodi, F. Panzneri,, D. Rossi, E. Turrini, "Experimental Evaluation of a QoS-aware Application Server," Network Computing and Applications, Fourth IEEE International Symposium on , vol., no., pp.259-262, 27-29 July 2005.</p> <p>10. Apache Software Foundation. The Apache Tomcat ConnectorReferenceGuide.2010.http://tomcat.apache.org/connectorsdoc/reference/workers.html</p> <p>11. Gilly de la Sierra-Llamazares. Tesis: An adaptive admission control and load balancing algorithm for a QoS-aware Web system. Universitat de les Illes Balears. 2009. http://www.thesisenxarxa.net/TDX-1211109-113725/index_cs.html</p> <p>12. H. Elmeleegy, N. Adly, and M. Nagi. "Adaptive Cache-Driven Request Distribution in Clustered EJB Systems". Proceedings of the Tenth International Conference on parallel and Distributed Systems (ICPADS'04), 179-186, 2004,</p> <p>13. R. Johnson., Expert One-on-One J2EE Design and Development. Wrox Press. 2003.</p> <p>14. R. B'Far, Mobile Computing Principles: Designing and Developing Mobile Applications with UML and XML. Cambridge University Press. 2005.</p>	24-29
	Authors: K. Venkata Ramana, M. Ravi Kishor	
	Paper Title: To Reduced the Energy Conception in Wireless Sensor Networks by Using Selective Message Forwarding Schemes	
8.	<p>Abstract: In a wireless sensor network where nodes have limited energy and forward messages of different priorities are frequent in the context of wireless sensor networks. So introduced several selective message forwarding policies to save energy and extend the lifetime of WSN. Forwarding schemes were designed for three different scenarios:1) when sensors maximize the importance of their own transmitted messages ; 2) when sensors maximize the</p>	30-33

	<p>importance of messages that have been successfully retransmitted by at least one of its neighbors; and 3) when sensors maximize the importance of the messages that successfully arrive to the sink . The three schemes have been compared under different criteria. From an overall network efficiency perspective, the first scheme performed worse than its counterparts, but it required less signaling overhead. More sophisticated schemes will achieve better importance performance, but will also require information from other sensors. It is a greater impact on the overall network performance.</p> <p>Keywords: AODOV, Markov Decision, Bayesian Decision Modal, wireless sensor networks.</p> <p>References:</p> <ol style="list-style-type: none"> 1. R. Arroyo-Valles, A. G. Marques, and J. Cid-Sueiro, "Optimal selective transmission under energy constraints in sensor networks," IEEE Trans. Mobile Computing, vol. 8, no. 11, pp. 1524–1538, Nov. 2009. 2. R. Arroyo-Valles, A. G. Marques, and J. Cid-Sueiro, Wireless Sensor Networks. IN-TECH, 2010, ch. Energy-aware Selective Communications in Sensor Networks. 3. E. Shih, S.-H. Cho, N. Ickes, R. Min, A. Sinha, A. Wang, and A. Chandrakasan, "Physical layer driven protocol and algorithm design for energy-efficient wireless sensor networks," in Proc. 7th Annual ACM/IEEE Int'l Conf. on Mobile Computing and Networking (Mobicom 01), July 2001. 4. I. F. Akyildiz, W. Su, Y. Sankarasubramaniam, and E. Cayirci, "A survey on sensor networks," IEEE Commun. Mag., vol. 40, no. 8, pp. 102–114, Aug. 2002. 5. A. G. Marques, X. Wang, and G. B. Giannakis, "Minimizing transmitpower for coherent communications in wireless sensor networks with finite-rate feedback," IEEE Trans. Signal Process., vol. 56, no. 8, pp. 4446–4457, Sep. 2008. 6. M. Puterman, Markov Decision Processes. Wiley-Interscience, 200 7. S. Appadwedula, V. V. Veeravalli, and D. L. Jones, "Energy-efficient detection in sensor networks," IEEE J. Sel. Areas Commun., vol. 23, no. 4, pp. 693-702, Apr. 2005 					
9.	<table border="1"> <tr> <td>Authors:</td> <td>Shakera Shaikh, Veena Gulhane</td> </tr> <tr> <td>Paper Title:</td> <td>User Authentication using Colors and data security using Armstrong numbers for Wireless Sensor Networks</td> </tr> </table> <p>Abstract: In real world, data security plays an important role where confidentiality, authentication, integrity, non repudiation are given importance. A wireless sensor network (WSN) consisting of a large number of tiny sensors can be an effective tool for gathering data in diverse kinds of environments. The data collected by each sensor node is communicated to the base station, which forwards the data to the end user. In wireless sensor network data security plays an important role where confidentiality, authentication, integrity, non repudiation are given importance. This paper, propose a User Authentication (UA) scheme for Wireless Sensor Networks (WSNs), which employs RGB color cube algorithm and Armstrong number for data security. The simulation results on NS2 show that Proposed scheme is not only secure but also increase speed of communication than the existing ATTUA scheme.</p> <p>Keywords: WSNs, data security, colors, Armstrong numbers, authentication.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Ismail Butun and Ravi Sankar, 2011. "Advanced Two Tier User Authentication Scheme for Heterogeneous Wireless Sensor Networks". 2nd IEEE CCNC Research Student Workshop. 2. X.H. Le, S. Lee, and Y.K. Lee. "Two-Tier User Authentication Scheme for Heterogeneous Sensor Networks." the 5th IEEE International Conference on Distributed Computing in Sensor Systems, (DCOSS '09), Marina Del Rey, California, USA, June 8-10, 2009. 3. K.H.M. Wong, Y. Zheng, J. Cao, and S. Wang. "A dynamic user authentication scheme for wireless sensor networks." IEEE International Conference on Sensor Networks, Ubiquitous, and Trustworthy Computing, 2006. 4. H.R. Tseng, R.H. Jan, and W. Yang. "An Improved Dynamic User Authentication Scheme for Wireless Sensor Networks." IEEE Global Communications Conference, (GLOBECOM 2007), USA, November 2007, pp. 986-990. 5. Z. Benenson, N. Gedick, and O. Raivio, "Realizing robust user authentication in sensor networks." in Workshop on Real-World Wireless Sensor Networks, 2005 6. Binod Vaidya, Jorge Sá Silva, Joel J. P. C. Rodrigues, 2009. "Robust Dynamic User Authentication Scheme for Wireless Sensor Networks" proceeding of the 5th ACM symposium on QOS and security for wireless and mobile networks. 7. Omar Cheikhrouhou1,2, Anis Koubaa3,4, Manel Boujelben1, Mohamed Abid1, 2010. "A Lightweight User Authentication Scheme for Wireless Sensor Networks" International Conference on Sensor Networks, Ubiquitous, and Trustworthy Computing. 8. Jiang, B. Li, and H. Xu, "An efficient scheme for user authentication in wireless sensor networks" in 21st International Conference on Advanced Information Networking and Applications Workshops 9. Orhanou, G. El Hajji, S.; Bentaleb, 2011. "EPS AES-based confidentiality and integrity algorithms: Complexity study". International conference on Multimedia communication and computing. 10. Hyeopgeon Lee, Kyoung-hwa Lee, Yongtae Shin, 2010. "Implementation and Performance Analysis of AES-128 CBC algorithm in WSNs". 11. Hu, Zhihua, 2011. "Progress on advanced encryption standard". International conference on Intelligence Science and Information Engineering, China. 12. Vishnu, M.B.; Tiong, S.K.; Zaini, M.; Koh, S.P., 2008. "Security enhancement of digital motion image transmission using hybrid AES-DES algorithm" 14 Asia Pacific conference on communications. 13. Wong, M. M.; Wong, M. L. D.; Nandi, A. K.; Hijazin, 2011. "Construction of Optimum Composite Field Architecture for Compact High-Throughput AES S-Boxes". International conference on Integration (Vlsi Systems) 14. Advanced Encryption Standard", 2001. Federal Information Processing Standard Publications. 15. Pathan, A.S.K. Dept. of Comput. Engg., Kyung Hee Univ., Seoul Hyung-Woo Lee ; Choong Seon Hong 16. "Security in wireless sensor networks: issues and challenges", Advanced Communication Technology, 2006. IACT 2006, 17. F. L. LEWIS. "Wireless sensor networks" Associate Director for Research Head, Advanced Controls, Sensors, and MEMS Group Automation and Robotics Research Institute The University of Texas at Arlington, 2004 18. NS-2-Network Simulator and Emulator, http://www.isi.edu/nsnam/ns 	Authors:	Shakera Shaikh, Veena Gulhane	Paper Title:	User Authentication using Colors and data security using Armstrong numbers for Wireless Sensor Networks	34-39
Authors:	Shakera Shaikh, Veena Gulhane					
Paper Title:	User Authentication using Colors and data security using Armstrong numbers for Wireless Sensor Networks					
10.	<table border="1"> <tr> <td>Authors:</td> <td>Chetan A. Samarth, A. K. Mahalle</td> </tr> <tr> <td>Paper Title:</td> <td>Design Optimization of Speed Ratio for Conventional Chain Drive Used In Tricycle</td> </tr> </table> <p>Abstract: The present paper is work to optimize the speed ratio done to improve the efficiency of cycling. Various design changes in the components of chain drive mechanism of bicycle has been done to increase the mechanical advantage. In the previous study the mechanical efficiency of cycling was investigated with new developed pedal-</p>	Authors:	Chetan A. Samarth, A. K. Mahalle	Paper Title:	Design Optimization of Speed Ratio for Conventional Chain Drive Used In Tricycle	40-43
Authors:	Chetan A. Samarth, A. K. Mahalle					
Paper Title:	Design Optimization of Speed Ratio for Conventional Chain Drive Used In Tricycle					

	<p>crank prototype (PP). The efficiency values were compared with those obtained, in the same experimental conditions and with the same subjects, by using a standard pedal–crank system (SP). the improvements in the efficiency of cycling observed in this study were rather small (about 2%) and apparent only at the higher load tested . further study also attempted to design a non-circular chainring that increases the crank power by 2.9% compared to a conventional circular chainring. Increase in the average crank power was the result of the optimal chainring slowing down the crank velocity during the down stroke (power phase) to allow muscle to generate power longer and produce more external work but the data also showed that the chainring with higher eccentricity increased negative muscle work following the power phase due to muscle activation-deactivation dynamics. This paper proposes to measure the optimal gear ratio as well as design of sprockets for the drive system of tricycle. The study provides guideline, design specification and performance measure to design efficient drive system.</p> <p>Keywords: mechanical efficiency, non-circular chainring, pedal-crank prototype (PP)</p> <p>References:</p> <ol style="list-style-type: none"> 1. Paola Zamparo, Alberto E. Minetti, Pietro E. di Prampero “Mechanical Efficiency of Cycling With a New Developed Pedal Crank” Journal of Biomechanics 35 (2002) 1387–1398. 2. Jeffery W. Rankin, Richard R. Neptune “A theoretical analysis Of an optimal chainring shape to maximize crank power during Isokinetic pedaling” Journal of Biomechanics 41 (2008) 1494–1502 3. J. C. Martin, W.W. Spirduso “Determinants of maximum Cycling power: crank length, pedaling rate and pedal speed” Eur J Appl Physiol (2001) 84: 413-418 4. Danny Too and Gerald E. Landwer “The Biomechanics of Force and Power Production in human Powered Vehicles” Human Power: Technical Journal of the International Human Powered Vehicle Association, 55, 3-6. 5. Ernst Albin Hansen, Lars Vincents Jorgensen, Kurt Jensen, Benjamin Jon Fregly, Gisela Sjogaard “Crank Inertial Load Affects Freely Chosen Pedal Rate during Cycling” Journal of Biomechanics 35 (2002) 277–285. 6. An eBook of “bicycling science” by David Gordon Wilson. 7. A text Book of “Machine Design” by Khurmi & Gupta. 					
11.	<table border="1"> <tr> <td>Authors:</td> <td>Piyush K. Ingole, N. A. Chavhan</td> </tr> <tr> <td>Paper Title:</td> <td>Network Selection Algorithm for Vertical Handover in Co-operative Wireless Network</td> </tr> </table> <p>Abstract: Wireless networks are emerging towards a heterogeneous co-operative architecture to support communication needs of the end user. In this paper a centralized spectrum manager is presented which calculates the traffic load on each network and allocates another network to the user by using the network selection algorithm. Simulation results shows that the centralized spectrum manager handover the end user to another network seamlessly and improve the global spectrum efficiency</p> <p>Keywords: Co-operative Network, Resource allocation, Traffic Prediction</p> <p>References:</p> <ol style="list-style-type: none"> 1. I. F. Akyildiz et al. "Mobility Management in Next Generation Wireless System!." Proc. IEEE. vol. 87. no. 8, Aug. 1999. pp, 1347-84. 2. F. Zhu and J.Mcnair, “Vertical handoffs in fourth-generation multinetwrok environments,” in IEEE Wireless Communication, vol. 11, no. 3, pp. 8–15, June 2004. 3. B. Letaief and W. Zhang, “Co-operative Communications for Cognitive Networks”, Proc. of the IEEE, vol:97, issue:5, 2009, pp. 878-893. 4. K-C Chen and R. Prasad, “Cognitive Radio Networks”, John Wiley & Sons, 2009. 5. S. Y. Hui and K. H. Yeung, “Challenges in the Migration to 4G Mobile Systems,” IEEE Commun. Mag., vol. 41, no. 12, Dec. 2003, pp. 54–59. 6. I.F. Akyildiz, S. Mohanty, and Jiang Xie, “A ubiquitous mobile communication architecture for next-generation heterogeneous wireless systems”, IEEE Communications Magazine, vol. 43, no. 6, pp. 29–36, June 2005. 7. T. Soderstrom and P. Stoica. “System identification”. 1st Edition. Prentice Hall International (UK) Ltd. 8. “Wireless Communications:Principles and Practice” 2nd Edition. Theodore Rappaport. 9. E. Gustafsson and A. Jonsso, “Always Best Connected,” IEEE Wireless Commun., vol. 10, Feb. 2003, pp. 49–55. 10. “Fast, recursive-least-squares transversal filters for adaptive filtering” Acoustics, Speech and Signal Processing, IEEE Transactions pp 304 – 337 11. E. H. Ong and J. Y. Khan, “Co-operative Radio Resource Management Framework for Future IP based Multiple Radio Access Technologies Environment”, Computer Networks, vol:54, no:7, May 2010, pp. 1083-1107. 12. R. W. Thomas, D. H. Friend L. A. DaSilva and A. B. MacKenzie, “ Cognitive Networks Adaption and Learning to Achieve End-to-End Performance Objectives”, IEEE Communications Magazine, December 2006, pp. 51-57. 	Authors:	Piyush K. Ingole, N. A. Chavhan	Paper Title:	Network Selection Algorithm for Vertical Handover in Co-operative Wireless Network	44-48
Authors:	Piyush K. Ingole, N. A. Chavhan					
Paper Title:	Network Selection Algorithm for Vertical Handover in Co-operative Wireless Network					
12.	<table border="1"> <tr> <td>Authors:</td> <td>Shruti Vashist, M.K.Soni, Pramod Singal</td> </tr> <tr> <td>Paper Title:</td> <td>Design of a Square Microstrip Patch Antenna</td> </tr> </table> <p>Abstract: In recent years, great interest is focused on microstrip antennas for their small volumes, low profiles, good integration, low costs and good performance. With the continuous growth of wireless and mobile communication service and the constant miniaturization of communication equipment, there are higher demands for the volume of antennas, integration and working band. This paper presents a basic square shaped microstrip patch antenna for wireless communications system which is suitable for 8GHz to 11 GHz band operations. These systems may include various combinations of WiMAX (Worldwide Interoperability for Microwave Access) and wireless local-area network (WLAN). A square microstrip patch antenna is designed to operate at 9.4GHz and 11GHz. A triangular slot is cut in the square patch to provide three bands at resonant frequency of 8.36MHZ, 9.84MHz and 11GHZ. The effect of cutting the slot on the original patch is examined. This design has several advantages as the total antenna volume can be reused, and therefore the overall antenna will be compact..The results confirm good performance of the single and multiband antenna design.</p> <p>Keywords: Square Microstrip PatchAntenna (RMPA), Wimax, Wlan, multiple frequency bands.</p> <p>References:</p>	Authors:	Shruti Vashist, M.K.Soni, Pramod Singal	Paper Title:	Design of a Square Microstrip Patch Antenna	49-52
Authors:	Shruti Vashist, M.K.Soni, Pramod Singal					
Paper Title:	Design of a Square Microstrip Patch Antenna					

1. Costantine,J.,K. Y. Kabanal,A. El Hajj,and M. Rammal,“New multi-band microstrip antenna design for wireless communications,” IEEE Antennas and Propagation Magazine,Vol. 48,No. 6, 181–186,December 2007.
3. H. Sabri and Z. Atlasbaf "Two Novel Compact Triple-Band Microstrip Annular-Ring Slot Antenna For PCS-1900 AND WLAN Applications" Progress In Electromagnetic Research Letters, Vol. 5, 87–98, 2008
4. M. Abu and M. K. A. Rahim "Triple Band Printed Dipole TAG Antenna for RFID" Progress In Electromagnetic Research C, Vol. 9, 145{153, 2009
5. R. L. Li, B. Pan, T. Wu, J. Laskar, and M. M.Tentzeris "A Triple-Band Low-Profile Planar Antenna for Wireless Applications" December 15, 2008, IEEE Xplore
6. M. Ben Ahmed, M. Bouhorma, F.Elouaai,A.Mamouni "Design of New Multi Standard Patch Antenna GSM/PCS/UMTS/HIPERLAN for Mobile Cellular Phones" European Journal of Scientific Research, ISSN 1450-216X Vol.32 No.2 (2009), pp.151-157 [6] R. K. Gupta "Printed TRI-BAND Monopole Antenna Structures For Wireless Applications" Issue 2, Vol I, Apr 2010
8. M. A. S. Alkanhal"Composite Compact Triple- Band Microstrip Antennas"Progress In Electromagnetics Research, PIER 93, 221{236, 2009
9. Jawad K. Ali "A New Compact Size Microstrip Patch Antenna with Irregular Slots for Handheld GPS Application" Eng.& Technology, Vol.26, No.10, 2008
10. D. N. Elsheakh, H. A. Elsadek, and E. A. Abdallah "Reconfigurable Single and MultiBand Inset Feed Microstrip Patch Antenna For Wireless Communication Devices" Progress In Electromagnetics Research C, Vol. 12, 191{201, 2010.
11. Raj Kumar, George Mathai and J.P. Shinde "Design of Compact Multiband EBG and Effect on Antenna Performance " International Journal of Recent Trends in Engineering, Vol 2, No. 5, November 2009.
12. Mohammed Y. M. Yousef, Abd Elhamid Gaafar, Abd Elaziz A. Abd Elaziz "Dual Band Circularly Polarized Microstrip Patch Antenna For Wi-Fi Applications" July 2010, NGMAST'10 Conference Publishing Services (CPS) and IEEE Xplore.(Accepted-in Press) [12] D. D. Krishna, M. Gopikrishna, C. K. Aanandan "Compact dual band slot loaded circular microstrip antenna with a superstrip" Progress In Electromagnetic Research, PIER 83, 245–255, 2008.F
13. E. Wang, J. Zheng, Y. Liu "A novel dual-band patch antenna for WLAN communication" Progress in Electromagnetic Research C, Vol. 6, 93-102, 2009.
14. Thomas, K.G. Sreenivasan, M. "A simple dual-band microstrip-fed Printed antenna for WLAN applications" Microwaves, Antennas & Propagation, IET,June 2009.

Authors: **Ginni Tonk, Indu Kashyap, S.S. Tyagi**

Paper Title: **Performance Comparison of Ad-Hoc Network Routing Protocols using NS-2**

Abstract: Mobile Ad-hoc Network (MANET) is an infrastructure less and decentralized network which need a robust dynamic routing protocol. Many routing protocols for such networks have been proposed so far. The most popular ones are Dynamic Source Routing (DSR), Ad-hoc On Demand Distance Vector (AODV), and Destination-Sequenced Distance Vector (DSDV) routing protocol. In this paper, we are going to compare Mobile Ad-Hoc network routing protocols DSDV, AODV and DSR using network simulator NS-2. The performance matrix includes PDF (Packet delivery fraction), Average end-to-end delay, and Normalized Routing Load. We have compared the performance of routing protocols by varying pause time, number of nodes and maximum speed. The comparison result shows that AODV has the highest PDF and NRL while DSR gives the highest Average End-to-End delay.

Keywords: AODV,DSDV,DSR,MANET

References:

1. Bouhorma, M; Bentaouit, H; Boudhir, A; “Performance comparison of adhoc routing protocol AODV and DSR” Multimedia Computing and Systems, 2009. ICMS ’09. International Conference on Digital Object Identifier: 10.1109/MMCS.2009.5256641 Publication Year: 2009, Page(s): 511-514
2. E. Perkins and E. M. Royer, “Ad-hoc on demand distance vector routing,” in Proceedings of the 2nd IEEE Workshop on Mobile Computing Systems and Applications (WMCSA’99),vol. 3, New Orleans, LA, USA, February 1999, pp. 90–100.
3. Perkins, E. B. Royer and S. Das (2003), "Ad hoc On- Demand Distance Vector (AODV) Routing", RFC 3561,IETF Network Working Group.
4. E. Perkins, E. M. Royer, I. D. Chakeres, “Ad hoc On-Demand Distance Vector (AODV) Routing Protocol”, draft-perkins-manet-aodvbis-00.txt, October 2003.
5. Dynamic Source routing in wireless Ad hoc Networks by David B. Johnson, David A. Maltz, computer science department, Carnegie Mellon University, Pittsburgh Mobile computing conference in year 1996, pages 153- 181 volume 353
6. J. Broch, D. A. Maltz, D. B. Johnson, Y.-C. Hu, and J. Jetcheva, “A performance comparison of multi-hop wireless ad hoc network routing protocols,” in Proceedings of the 4th Annual ACM/IEEE International Conference on Mobile Computing and Networking (MOBICOM’98), October 1998, pp. 85–97.
7. M. Lakshmi, P. E. Sankaranarayanan, Performance Analysis of Three routing protocols in wireless Mobile Ad Hoc Network. Information technology Journal 5 (1), 114-120,2006.
8. Mittal, S.;Kaur,P, “Performance Comparison of AODV, DSR and ZRP Routing Protocols in MANET’S” Advances in Computing, Control & Telecommunication Technologies, 2009. ACT ’09. International Conference on Digital Object Identifier: 10.1109/ACT.2009.50 Publication Year: 2009, Page(s): 165-168
9. Nadia Qasim, Fatin Said, Hamid Aghvami ,” Mobile Ad Hoc Networks Simulations Using Routing Protocols for Performance Comparisons”, Proceedings of the World Congress on Engineering 2008 Vol I WCE 2008, July 2 - 4, 2008, London, U.K.
10. Runcai Huang; Yiwen Zhuang; Qiying Cao, “Simulation and Analysis of Protocols in Ad Hoc Network” in Electronic Computer Technology, 2009 International conference on Digital Object Identifier: 10.1109/ICECT.2009.66 Publication Year: 2009, Page(s): 169 – 173
11. R. Misra, C. R. Manda (2005)1, "Performance Comparison of AODV/DSR On-Demand Routing Protocols for Ad Hoc Networks in Constrained Situation", IEEE ICPWC 2005.
12. S. R. Das, R. Castaneda, J. Yan, R. Sengupta, “Comparative Performance Evaluation of Routing Protocols for Mobile Ad hoc Networks”, Proceedings of the International Conference on Computer Communications and Networks, pp.153-161, 1998.
13. Tuteja, Asma; Gujral, Rajneesh; Thalia, Sunil; “Comparative Performance Analysis of DSDV, AODV and DSR Routing Protocols in MANET Using NS2” Advances in Computer Engineering (ACE), 2010 International Conference on Digital Object Identifier: 10.1109/ACT.2010.16 Publication Year: 2010, Page(s): 330-333
14. "The network simulator ns-2. <http://www.isi.edu/nsnam/ns2...>
15. V. Nazari, K. Ziarati (2006), "Performance Comparison of Routing Protocols for Mobile Ad hoc Networks", IEEE 2006.

Authors: **Arvind K. Sharma**

Paper Title: **A Comparative Study between Web Mining Tools over some WUM Algorithms to Analyze Web Access Logs**

Abstract: This paper has attempted to provide an up-to-date survey of the rapidly growing area of Web usage

mining, which is the demand of current technology. In this paper, we present an overview of the various research areas in Web data mining and then focus on the Web usage mining tools and techniques. Web mining continues to remain as a potential research area in the present scenario. In this context, the various Web usage mining algorithms are discussed and their relative comparison of merits and demerits are also presented and the most appropriate ones are selected based on the characteristics of the data available from the Web server log files. Finally, we have investigated three powerful Web usage mining tools. The use of these tools is also illustrated through the analysis of one case study. The results of Web usage mining need to be visualised in order to assist with their analysis and interpretation.

Keywords: Web Data Mining, Web logs, WUM Tools

References:

1. The W3C Technology Stack; World Wide Web Consortium; Retrieved April 21, 2012
2. <http://whatis.techtarget.com> on May 24, 2012
3. Zaiane O.; Conference Tutorial Notes: Web Mining Concepts, Practices and Research; In Proc. SDBD 2000
4. Oren Etzioni; The World Wide Web: Quagmire or gold mine. Communications of the ACM, 39(11); 65-68, 1996
5. R. Kosala, and et al.; Web mining Research: A Survey
6. S.K. Madria et al.; Research issues in Web data mining; In Proceedings of Data Warehousing and Knowledge Discovery, First International Conference, DaWaK'99, pages 303-312, 1999
7. R. Cooley, Web Usage Mining: Discovery and Application of Interesting Patterns from Web data, University of Minnesota, May 2000
8. Piatetsky Shapiro g., and et al.; Advances in Knowledge Discovery and Data Mining, AAAI/MIT Press, 1996
9. Liu B.: Web Data Mining: Exploring Hyperlinks, Contents and Usage Data, Springer Berlin Heidelberg New York, 2006
10. S.K. Pani, and et al.; Web Usage Mining: A Survey on Pattern Extraction from Web Logs; International Journal of Instrumentation, Control & Automation (IJICA), Volume 1, Issue 1, 2011
11. Cooley R., et al.; Web mining: Information and Pattern Discovery on the World Wide Web. A survey paper; In: Proc. ICTAI97, 1997
12. L.K. Joshila Grace, and et al.; 'Web Log Data Analysis and Mining' in Proc CCSIT-2011, Springer CCIS, Vol 133, (Jan 2011), pp 459-469
13. K. R. Suneetha, and R. Krishnamoorthi, 'Identifying User Behavior by Analyzing Web Server Access Log File'; IJCSNS International Journal of Computer Science and Network Security, vol. 9, pp. 327-332, 2009
14. Ratnesh Kumar Jain, and et al.; 'Efficient Web Log Mining using Doubly Linked Tree', International Journal of Computer Science and Information Security, IJCSIS, Vol. 3, July 2009
15. Ming-Syan Chen, and et al.; 'Efficient Data Mining for Path Traversal Patterns', IEEE Transactions on Knowledge and Data Engineering, Vol. 10, No. 2, March/April 1998
16. Jianhan Zhu, and et al.; 'Using Markov Chains for Link Prediction in Adaptive Web Sites', Soft-Ware 2002, LNCS 2311, pp. 60-73, 2002
17. WANG Tong, and HE Pi-lian, 'Web Log Mining by an Improved Apriori All Algorithm', World Academy of Science, Engineering and Technology, Vol. 4, 2005
18. Hengshan Wang, and et al.; 'Design and Implementation of a Web Usage Mining Model Based on Fpgrowth and Prefixspan'; Communications of the IIMA, Vol. 6, Issue 2, 2006
19. Sandeep Singh Rawat, and et al.; 'Discovering Potential User Browsing Behaviors Using Custom-Built Apriori Algorithm', International Journal of Computer Science & Information Technology (IJCSIT) Vol.2, No.4, August 2010
20. Navin Kumar Tyagi, and et. Al; 'Analysis of Server Log by Web Usage Mining for Website Improvement'; IJCSI International Journal of Computer Science Issues, Vol. 7, Issue 4, No. 8, July 2011
21. Paola Britos, and et al.; 'Web Usage Mining Using Self Organized Maps', International Journal of Computer Science and Network Security, Vol.7 No.6, June 2007
22. Mehrdad Jalali, and et al.; 'Web User Navigation Pattern Mining Approach Based on Graph Partitioning Algorithm', Journal of Theoretical and Applied Information Technology, Pakistan
23. Kobra Etmnani, and et al.; 'Web Usage Mining: Users' navigational patterns extraction from web logs using Ant-based Clustering Method', IFSA-EUSFLAT 2009
24. N. Sujatha, K. Iyakutty, 'Refinement of Web usage Data Clustering from K-means with Genetic Algorithm', European Journal of Scientific Research ISSN 1450-216X Vol.42 No.3 (2010), pp.464-476
25. K.Poongothai et al., 'Efficient Web Usage Mining with Clustering'; IJCSI International Journal of Computer Science Issues, Vol. 8, Issue 6, No 3, November 2011
26. Mahdi Khosravi et al., 'Dynamic Mining of Users Interest Navigation Patterns Using Naive Bayesian Method', 978-1-4244- 8230-6/10/©2010 IEEE
27. <http://www.bitstrike.com> (Last Accessed: 24 May 2012) Bitstrike Software (2004): Absolute Log Analyzer.
28. <http://www.weblogexpert.com> (Last Accessed: 24 May 2012) Alentum Software Inc (2004): WebLog Expert.
29. <http://www.123logalyzer.com> (Last Accessed: 24 May 2012) Zy Computing Inc (2003): 123 Log Analyzer. San Jose, USA.
30. <http://en.wikipedia.org> seen on May 2012.

Authors: Geeta Nijhawan, M.K. Soni

Paper Title: A Comparative Study of Two Different Neural Models For Speaker Recognition Systems

Abstract: In recent years there has been a significant amount of work, both theoretical and experimental, that has established the viability of artificial neural networks (ANN's) as a useful technology for speech recognition. It has been shown that neural networks can be used to augment speech recognizers whose underlying structure is essentially that of hidden Markov models (HMM's). In this paper, we first give a brief overview of automatic speech recognition (ASR) and then describe the use of ANN's as statistical estimators. We have compared back propagation (BP) neural network and radial basis function (RBF) network's performance as applied to the speaker recognition. We have compared the two neural network results by MATLAB simulation. From the quantitative point we have proved that the RBF neural network is more efficient and accurate than BP neural network in speaker recognition, and thus more suitable for practical applications.

Keywords: Speaker recognition system, Linear Predictive Coding (LPC), Neural networks, Mel Frequency Cepstrum Coefficient (MFCC), Back Propagation (BP); Radial Basis Function (RBF).

References:

1. Md Sah Bin Hj Salam, Dzulkifli Mohamad Sheikh Hussain Shaikh Salleh, " Temporal Speech Normalization Methods Comparison in Speech Recognition Using
2. Neural Network", International Conference of Soft Computing and Pattern Recognition, 2009
3. Khalifa, O.O, et. al, "Speech coding for Bluetooth with CVSD algorithm", Proc. RF and Microwave Conference. Selangor, Malaysia,

15.

Page(s):227 – 229, 5-6 Oct. 2004

4. Young, S., "A review of large vocabulary continuous speech", IEEE Signal Processing Magazine, v. 13, n 5, pp 45-57, 1996
5. Anup Kumar Paul¹, Dipankar Das², Md. Mustafa Kamal³, " Bangla Speech Recognition System using LPC and ANN",Seventh International Conference on Advances in Pattern Recognition,2009
6. Premakanthan, P.; Mikhael, W.B., "Speaker verification/recognition and the importance of selective feature extraction: review", Proceedings of the 44th IEEE 2001 Midwest Symposium on Circuits and Systems, 2001. MWSCAS 2001. Volume 1, 14-17 Page(s):57 – 61. Aug. 2001
7. Parson, T.W, "Voice and Speech Processing", New York, United States of America: McGraw-Hill. 294, 1987.
8. Hui Kong, Xuchun Li, Lei Wang, Earn Khwang Teoh, Jian-Gang Wang, Venkateswarlu, R "Generalized 2D principal component analysis", Proc. 2005 IEEE International Joint Conference on Volume 1, Aug. 2005.
9. Harry Wechsler, Vishal Kakkad, Jeffrey Huang, Srinivas
10. Gutta, V. Chen, "Automatic Video-based Person Authentication Using the RBF Network" First International Conference on Audio- and Video-Based Biometric Person Authentication, 1997 pages 85-92.
11. Gabriel Zigelboim and Dr Ilan D. Shallom," A comparison Study of Cepstral Analysis with Applications to Speech Recognition", International Conference on Information Technology: Research and Education,2006
12. Yongjin Wang and Ling Guan, "an investigation of speech-based human emotion recognition", IEEE 6th Workshop on Multimedia Signal Processing, 2004

Authors: **Yogita L. Kumbhare, Pankaj H. Rangaree**

Paper Title: **Noise Drain in Wireless Body Area Sensor Network**

Abstract: Wireless body area sensor networks low-power integrated circuits, and wireless communications have enabled the design of low-cost, miniature, lightweight, and intelligent physiological sensor nodes. These nodes, capable of sensing, processing, and communicating one or more vital signs, can be seamlessly integrated into wireless personal or body networks (WPANs or WBANs) for health monitoring. These networks promise to revolutionize health care by allowing inexpensive, non-invasive, continuous, ambulatory health monitoring with almost realtime updates of medical records via the Internet. This paper proposes a power and area efficient electrocardiogram (ECG) acquisition and signal processing application sensor node for wireless body area networks (WBAN). This sensor node can accurately record and detect the QRS peaks of ECG waveform with high-frequency noise suppression. analog front end integrated circuit (IC) and digital application. This ECG sensor node is convenient for long-term monitoring of cardiovascular condition of patients, and is very suitable for on-body WBAN applications. We minimize the other signal such as the ECG signal along with a bunch of noise is in analog form. In we use the High Pass Filter (HPF) to filter the noise from the ECG Signals. The ECG is a voltage difference, recorded between two metal plates or electrodes on the surface of the body

Keywords: Wireless body area sensor network, GSM model, ECG Sensor Node.

References:

1. Dipti D. Patil, Shamla Mantri, Himangi Pande, V.M.Wadhai, M.U.Kharat, January 2012 "Feature Extraction Techniques For Mining ECG Signals In WBAN For Healthcare Applications" International Journal of Advances in Computing and Information Researches ISSN:2277-4068, Volume 1– No.1,
2. Honggang Wang, Hua Fang, Liudong Xing, Min Chen,(2011) " An Integrated Biometric-based Security Framework Using Wavelet-Domain HMM in Wireless Body Area Networks (WBAN)" IEEE Communications Society subject matter experts for publication in the IEEE ICC proceedings.
3. Raju Singh(March 2011) "Confidentiality & Authentication Mechanism for Biometric Information Transmitted over Low Bandwidth & Unreliable channel" School of Computer Engineering and IT, Shobhit University, Meerut, India Vol.3, No.2,
4. Mikael Soini, Jussi Nummela, Petri Oksa, Leena Ukkonen and Lauri Sydänheimo (2009)." Wireless Body Area Network for Hip rehabilitation" Tampere University of Technology, Department of Electronics, Rauma Research Unit pp. 202-206 .
5. Cory Cornelius(August 2010) "On Usable Authentication for Wireless Body Area Networks" Department of Computer Science Dartmouth College, Presented at HealthSec, .
6. Jamil Y. Khan, Mehmet R. Yuce, and Farbood Karami "Performance Evaluation of a Wireless Body Area Sensor Network for Remote Patient Monitoring"
7. A. Soomro, D. Cavalcanti, IEEE (Feb 2007)"Opportunities & Challenges using WPAN and WLAN Technologies in Medical Environments", Communications Magazine, vol:45, no:2, page 114-122.
8. Adnan Saeed, Miad Faezipour IEEE 2009,
9. "Plug and Play Sensor Node for Body Area Network",.
10. Jamil Y. Khan,school of computer science,Australia,IEEE (09,07, 2009,)
11. "Wireless Body Area Network for Medical Applications".
12. Emil Jovanov, Dejan Raskovic, John Price,John Chapman, Anthony Moore, Abhishek Krishnamurthy,IEEE (2008) ." Patient Monitoring Using Personal Area Networks of Wireless Intelligent Sensors".
13. CHRIS OTTO, ALEKSANDAR MILENKOVIĆ, COREY SANDERS, EMIL JOVANOVIĆ, Journal of Mobile Multimedia, Vol. 1, No.4 (2006) 307-326 " SYSTEM ARCHITECTURE OF A WIRELESS BODY AREA SENSOR NETWORK FOR UBIQUITOUS HEALTH MONITORING".
14. Chao Chen and Carlos Pomalaza-Ráez , International Journal of Computer Science and Information Technology, Volume 2, Number 3, 16June 2010., ."Implementing and EvaluatingA wireless body Sensor System for Automated Physiological Data Acquisition At Home",
15. Frank Agyei-Ntim, Member IEEE, Kimberly Newman, Senior Member IEEE, September 2-6, 2009,
16. "Lifetime Estimation of Wireless Body Area Sensor Network for Patient Health Monitoring" 31st Annual International Conference of the IEEE EMBS Minneapolis, Minnesota, USA,
17. Adnan Saeed, Mehrdad Nourani, Gil Lee, Gopal Gupta and Lakshman Tamil ,IEEE 2007, " A Scalable Wireless Body Area Sensor Network for Health-Care Monitoring ", The University of Texas at Dallas, Richardson, Texas.
18. Adnan Saeed*, Miad Faezipour*, Mehrdad Nourani*, Subhash Banerjee, June 2009 , " A Scalable Wireless Body Area Network for Bio-Telemetry", Journal of Information Processing Systems, Vol.5, No.2.
19. Aleksandar Milenković, Chris Otto, Emil Jovanov, Accessed: July 2005, "Wireless Sensor Networks for Personal Health Monitoring:Issues and an Implementation".
20. Mehmet R. Yuce & Steven W. P. Ng & Naung L. Myo &Jamil Y. Khan &Wentai Liu , "Wireless Body Sensor Network Using Medical Implant Band", Received: 10 July 2007 / Accepted: 25 July 2007
21. CHRIS OTTO, ALEKSANDAR MILENKOVIĆ, COREY SANDERS, EMIL JOVANOVIĆ, January 10, 2006 "SYSTEM ARCHITECTURE OF A WIRELESS BODY AREA SENSOR NETWORK FOR UBIQUITOUS HEALTH MONITORING"
22. Xiyao Zhang, September 28, 2003" A Design of ECG Amplifier", Report of Project #1
23. Mehmet R. Yuce & Steven W. P. Ng & Naung L. Myo & Jamil Y. Khan &Wentai Liu, Accepted: 25 July 2007 " Wireless Body Sensor Network Using Medical Implant Band"

16.

17.	Authors:	R. M. Belokar, Yashveer Dhull, Surender Nain, Sudhir Nain	
	Paper Title:	Optimization of Time by Elimination of Unproductive Activities through 'MOST'	
	<p>Abstract: Productivity is being the most important thing in the manufacturing world. This paper highlights a methodology developed for minimization of non productive activities (NVA) and minimization of fatigue in manufacturing line by using Maynard's Operation Sequence Technique (MOST) revealed the excessive movements of operators. Work study in productivity improvement could be done in two approaches; which are method study and time study. Thus, this research will use process mapping as the method study and Maynard Operation Sequence Technique (MOST) as the time study method. All this initiated by performing work study on the manual operators' activities. This case study was conducted at a LPS Ltd. Rohtak (Haryana) company. From this study, NVA activities, the standard time, utilization and recommendation for man power planning could be established. The necessary changes were suggested in workplace to minimize the stress creating unproductive movements. These results could be used for optimization of time at the company. So, the paper, it is believed, would be great help to those working in the area of efficiency improvement in manufacturing industry.</p> <p>Keywords: MOST, Non-Value Added activities (NVA), Fatigue, Total Activity Time.</p> <p>References:</p> <ol style="list-style-type: none"> Gavriel Salvendy; Handbook of industrial engineering; Second Edition; Purdue University, West Lafayette, Indiana. Jiao, Jianxin and Tseng, Mitchell M.; 'A Pragmatic Approach to Product Costing Based on Standard Time Estimation', International Journal of operation & Production Management, 1999, Volume 19, Issue 7. Patil S.S. , Shinde B.M. , Katikar R.S. ,Kavade M.V. MOST an advance technique to improve productivity, National Conference on recent trends in CAD/CAM/CAE(NCRTC 2004) , 21-23 June 2004, R.I.T.Rajaramnager Zandin, Kjell (1990); MOST Work Measurement Systems, Marcel Dekker INC., New York. Rohana Abdullah, Aida Bahiyah Mohd Rodzi Labor Utilization and Man to Machine Ratio Study at a Semiconductor Facility ISSN: 2180-3811 Vol. 2 June 2011 Abdelrahman Rabie, Ph.D. Associate Professor Integrated Science and Technology Department James Madison University Harrisonburg, VA 22807, USA - A case Study: Application of BasicMOST in a Lock's Assembly. 		77-80
18.	Authors:	R.M. Belokar, Sudhir, Yashveer Dhull, Surender Nain	
	Paper Title:	Restructuring Manufacturing Process Using Matrix Method	
	<p>Abstract: In modern days competition is increasing in industries so time and cost are important factors. In this paper we present case studies on matrix method, so that best sequence with minimum time, minimum cost and reduced penalty (job changeover time from one machine to another) recommended for a particular product manufactured is achieved. Here two cases on idler pipe and idler shaft are analyzed and best sequences are generated.</p> <p>Keywords: Matrix method, cellular manufacturing, path matrix P_{ij}, total matrix T_{ij}.</p> <p>References:</p> <ol style="list-style-type: none"> Introduction to GT and GT AND Manufacturing (www.strategosinc.com) Ham, I. Hitomi, K. & Yoshida, T. [1985]. "Layout Planning for Group Technology in Group Technology". Applications to Production Management, 153-169. Groover, M. P., [2008]. "Automation production system and computer integrated manufacturing". Prentice Hall, New Jersey, USA. Black, J. [1983]. "Cellular Manufacturing Systems Reduce Setup Time, Make Small Lot Production Economical". Industrial Engineering, 36-48. Fry, T. Breen, M. & Wilson, M. [1987]. "A Successful Implementation of Group Technology & Cellular Manufacturing". Production & Inventory Management Journal, 28(3): 4-6. Book restructuring the manufacturing process applying the matrix method by Gideon halevi 		81-83
19.	Authors:	Gaurav, Amrit Kaur	
	Paper Title:	Comparison between Conventional PID and Fuzzy Logic Controller for Liquid Flow Control: Performance Evaluation of Fuzzy Logic and PID Controller by Using MATLAB/Simulink	
	<p>Abstract: Measuring the flow of liquids is a critical need in many industrial plants. In recent years, flow control has become a highly multi-disciplinary research activity encompassing theoretical, computational and experimental fluid dynamics. Fuzzy control is based on fuzzy logic-a logical system that is much closer in spirit to human thinking and natural language than traditional logical systems. During the past several years, fuzzy control has emerged as one of the most active and fruitful areas for research in the applications of fuzzy set theory, especially in the realm of industrial processes, which do not lend themselves to control by conventional methods because of a lack of quantitative data regarding the input-output relations. The fuzzy logic controller (FLC) based on fuzzy logic provides a means of converting a linguistic control strategy based on expert knowledge into an automatic control strategy. Fuzzy Logic controller has better stability, small overshoot, and fast response. In this Paper, performance analysis of the conventional PID controller and fuzzy logic controller has been done by the use of Matlab and Simulink and in the end comparison of various time domain parameters is done to prove that the fuzzy logic controller has small overshoot and fast response as compared to PID controller.</p> <p>Keywords: Flow control, Conventional control, Fuzzy logic control, Simulink.</p> <p>References:</p> <ol style="list-style-type: none"> Rem Langari,"Past, present and future of fuzzy control: A case for application of fuzzy logic in hierarchical control,"IEEE, pp.760-765, 1999. Chuen Chien Lee, "Fuzzy logic in control systems i.e. fuzzy logic controller,"IEEE Transactions on Systems, man and cybernetics, Vol 20, No.2, March/April 1990. J.Y.M. Cheung, A.S. Kamal," Fuzzy Logic Control of refrigerant flow", UKACC International Conference on Control '96, Conference 		84-88

	<p>Publication No. 427, 2-5 September 1996.</p> <ol style="list-style-type: none"> 4. Rajanbabu.N, Sreenadhan.S, Fahid K.A, Mohandas K P, "Design and implementation of a neuro-fuzzy controller for a flow system", presentation at FAE symposium, European university of lefke, Nov 2002. 5. A. Abdelgawadt, Adam Lewist, M. Elgamelt, Fadi Issa, N.F. Tzeng , and M. Bayoumit, " Remote Measuring of Flow Meters for Petroleum Engineering and Other Industrial Applications" The International Workshop on Computer Architecture for Machine Perception and Sensing, pp.99-103, September 2007. 6. Elangeshwaran Pathmanathan, Rosdiazli Ibrahim, " Development and Implementation of Fuzzy Logic Controller for Flow Control Application," Intelligent and Advanced Systems (ICIAS), International Conference on Digital Object Identifier, pp.1-6, 2010. 7. R. Manoj Manjunath,S, S. Janaki Raman , " Fuzzy Adaptive PID for Flow Control System based on OPC," IJCA Special Issue on "Computational Science - New Dimensions & Perspectives NCCSE", 2011. 8. http://en.wikipedia.org/wiki/Flow_meter. 9. http://www.virtuallaboratories.com/html/fluid_a.htm 					
20.	<table border="1" style="width: 100%;"> <tr> <td style="width: 20%;">Authors:</td> <td>P.Sivakumar, S.Ravi</td> </tr> <tr> <td>Paper Title:</td> <td>Vector Quantization Based Image Compression</td> </tr> </table>	Authors:	P.Sivakumar, S.Ravi	Paper Title:	Vector Quantization Based Image Compression	
Authors:	P.Sivakumar, S.Ravi					
Paper Title:	Vector Quantization Based Image Compression					
	<p>Abstract: An image compression method combining discrete wavelet transform (DWT) and vector quantization (VQ) is presented. First, a three-level DWT is performed on the original image resulting in ten separate sub bands. These sub bands are then vector quantized. VQ indices are Huffman coded to increase the compression ratio. Lloyd extended scalar quantization technique is used to design memory less vector quantization. A novel iterative error correction scheme is proposed to continuously check the image quality after sending the Huffman coded bit stream of the error codebook indices through the channel so as to improve the peak signal to noise ratio (PSNR) of the reconstructed image. The sub band of the wavelet transformed image is also generated for the error correction scheme using the difference between the original and the reconstructed images in the wavelet domain. The proposed method shows better image quality in terms of PSNR at the same compression ratio as compared to other DWT and VQ based image compression. The proposed method of image compression is to obtain the best possible fidelity for given rate.</p> <p>Keywords: Vector Quantization, Wavelet Transform, Compression Ratio.</p> <p>References:</p> <ol style="list-style-type: none"> 1. L. Prasad and S. Iyenqar, Wavelet Analysis with Applications to Image Processing. CRC-Press, 1997. 2. M. K. M. X. Wang, E. Chan and S. Panchanathan, "Wavelet Based Image Coding Using Nonlinear Interpolative Vector Quantization," IEEE transaction on image processing, vol. 5, no. 3, pp. 518–526, Mar. 1996. 3. W.-T. C. Ruey-Feng Chang and J.-S. Wang, "A Fast Finite-State Algorithm for Vector Quantizer Design," IEEE Transaction on Signal Processing, vol. 40, no. 1, pp. 221–225, Jan. 1992. 4. T. Kohonen, Self Organizing Maps, 3rd ed. Springer, 2001. 5. D.-S. Q. Hong Wang, Ling LU and X. Luo, "Image compression based on wavelet transform and vector quantization," IEEE Proceedings of the First International Conference on Machine Learning and Cybernetics, Beijing, China. 6. N. M. S. Rahim and T. Yahagi, "Image coding using an improved feature map finite-state vector quantization," IEICE Transactions on Fundamental of Electronics, Communications and Computer Sciences, vol. E85-A, no. 11, pp. 2453–2458, Nov. 2002. 7. S. J. L. Ching Yang Wang and L. W. Chang, "Wavelet Image Coding using variable Blocksize Vector Quantization with Optimal Quad tree Segmentation," ELSEVIER, Journal of Signal Processing: Image Communication, vol. 15, pp. 879–890, Nov. 2000. 8. O. O. Khalifa, "Fast Algorithm for VQ-based wavelet coding system," IEEE. Transaction on Image Processing, vol. 1, no. 2, pp. 205–220, Apr. 1992. 176 2008 International Joint Conference on Neural Networks (IJCNN 2008). 	89-94				