



Address:

Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd.

Exploring Innovation: A Key for Dedicated Services

22, First Floor, ShivLoke Phase-IV, Khajuri Kala, BHEL-Piplani, Bhopal (M.P.)-462021, India Website: <u>www.blueeyesintelligence.org</u> Email: <u>director@blueeyesintelligence.org</u>, <u>blueeyes@gmail.com</u> 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 Counceling, 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, Schhool 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, Mulllana, 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. Jayanthy

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 Skils, 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, Kaula 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 Informetics, 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 Cordinator, 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, ChuncheOnsi, Gangwondo, Korea

Dr. Sanjay M. Gulhane

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

Dr. K.K. Thyagharajan

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 Cheshmejgaz

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

144

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

INNOV

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

TING

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

P

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 Emerging Science and Engineering (IJESE)

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 Froks, 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, Deprtment 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 Ptriya

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 Muthayanmal 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	V Put	Jolume-1 Issue-8, June 2013, ISSN: 2319–6378 (Online) Dished By: Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd.	Page No.
	Authors:	Shirish Tripathi	
1.	Paper Title:	Design of Low Glitch Dynamic Phase Detector for Delay Locked Loop	
	Abstract: A simp Locked Loop to a improving the perf nm technology wit for simulations and power dissipation. based on D flip-flo	le Low Glitch Dynamic Phase Detector is proposed in this paper. The Dynamic PD helps Delay chieve phase error detection in high speed synchronous circuits and plays an important role in formance of the complete DLL block. A high speed, low glitch phase detector is proposed in 180 h VDD=1.8V in Cadence Schematic Composer for schematic capture, analog artist (Spectre) Tool d Virtuoso for layouts. The proposed PD is having a better phase sensitivity, phase noise and less Simulation results show that the proposed PD has low glitch as compared to conventional PD p. So, the speed of the proposed Dynamic PD is also high.	1-4
	Keywords: Delay	Locked Loop, Phase Detector, Cadence, CMOS Technology.	
	References: 1. Y. SINAN. HAN 2. C. JIA, "A Delay 3. M. G. JOHNSC Circuits, vol. 23, 4. M. MANSURI, Loops," IEEE J.	 VAY, "Delay Locked Loop Design", ECE 658 Project, December 2007. y-Locked Loop for Multiple Clock Phases/Delays Generation, Doctoral Thesis, Georgia Institute of Technology, 2005. N AND E. L. HUDSON, "A Variable Delay Line PLL for CPU-Coprocessor Synchronization," IEEE J. Solid-State pp. 1218-1223, Oct. 1988. D. LIU AND C. K. K. YANG, "Fast Frequency Acquisition Phase-Frequency Detectors for GSamples/s Phase-Locked Solid-State Circuits, vol. 37, pp. 1331-1334, Oct. 2002. 	
	Authors:	Srikanth Mandarapu, Sreedhar Lolla, M. V. Suresh Kumar	
	Paper Title:	Nonlinear Digital PID Controller for Position Controlled Electric Drive Systems	
2.	 Abstract: This paper discusses the implementation of Nonlinear digital PID controller for position controlled electric drive systems. The drawback with PD controller is that it produces a non aperiodic response, when it encounters a maximum torque limit. To overcome this drawback, the nonlinear PD controller is redesigned so to produce aperiodic response. The applicability of PD controller is limited only for the cases of reference input changes, while along with reference input, if disturbance inputs are also considered, the output results in a steady state error (S.S.E), which is proportional to the disturbance value. To minimize the S.S.E while producing a strong aperiodic response, it is proposed to implement a nonlinear digital PID controller. The proposed scheme in this paper is compared with the linear mode, is implemented in MATLAB and from the obtained results its possible use, limitations and counter measures have been studied. Keywords: Anti wind-up, non linear PID controller, PD controller, quantizer, S.S.E, torque limiter. References: H. K. Khalil, Nonlinear Systems, third edition. Prentice Hall, 2000. J Alvarez-Ramirez, R Kelly, I Cervantes, "Semiglobal stability of saturated linear PID control for robot manipulators"- Automatica, 2003, Elsevier. PR Ouyang, WJ Zhang, FX Wu, "Nonlinear PD control for trajectory tracking with consideration of the design for control methodology"-liEEE Transactions on Robotics and Automation, 2002 Discrete-time control systems, K.Ogata, Prentice Hall 1995. S. Kulkarni and M. A. El-Sharkawi, "Intelligent Precision Position Control of Elastic Drive Systems", IEEE Transactions on Energy Conversion, vol. 16, no. 1 March 2001, pp 26-31. Slobodan N. Vukosavic, Digital control of electric drives, Springer, 2007, pp		5-8
	Authors:	A. Srinagesh, K. Aravinda, G. P. Saradhi Varma, A. Govardhan, M. Sree Latha	
	Paper Title:	A Modified Shape Feature Extraction Technique for Image Retrieval	
3.	Abstract: Semant applications or do features. The proce- new Modified Sh discriminate Object next crucial step w from the database technique with The extracted using the for that image in to discriminating feat distance between t Based on the simi compared with oth Keywords: Conter Descriptor.	ic based Image retrieval is an emerging research area and is currently the mainstay in variety of mains. In recent times, there exists a lot of gap between the high level semantics and low level ess of Features extraction is Application-specific or options are limited. In this paper, we propose a ape Descriptor (MSD) feature extraction technique which is used as descriptive feature to ets in an image database. In Object recognition after initial Pre-processing, feature extraction is the which determines the efficiency of the technique or method. In our approach, a test image is taken , which is then divided into 8x8 Blocks each; shape structure is detected using edge detection reshold method to generate the shape feature vector. Then, texton-based texture, color features are existing Multi-texton Histogram (MTH) method. To form the final discriminating feature vector otal, three features are extracted namely shape, texture and color for that particular image to form a ture vector which this then stored in a feature library. When a query image is given Euclidean the query image and the test images feature values available in the feature library are computed. larity characteristics top-k images are retrieved. Our proposed method gives better results when er existing techniques.	9-13

References:

- 1. B.Julesz, Textons, the elements of texture perception and their interactions, Nature 290(5802) (1981)91–97.
- 2. B.Julesz, Texton gradients: the texton theory revisited, Biological Cybernetics 54 (1986)245–251.
- 3. G-H. Liu, L. Zhang, et al., Image retrieval based on multi-texton histogram, Pattern Recognition 43 (7) (2010) 2380–2389.
- 4. Guang -Hai Liu , Zuo-Yong Li, Lei Zhang , Yong Xu" Image retrieval based on micro-structure descriptor" Pattern Recognition 44(7) (2011) 2123–2133
- S. Belongie, C. Carson, H. Greenspan, and J. Malik. Color- and texture based image segmentation using EM and its application to contentbased image retrieval. In Proceedings of the Sixth International Conference on Computer Vision, 1998.
- 6. Petrakis E. and Faloutsos A., "Similarity searching in medical image databases," Journal of IEEE Transaction on Knowledge and Data Engineering, vol. 9, pp435-447, 1997.
- 7. P. S. Hiremath and Jagadeesh Pujari, "Content Based Image Retrieval based on Color, Texture and Shape features using Image and its complement" -Dept. of P.G. Studies and Research in Computer Science, Gulbarga University, Gulbarga, Karnataka, India-2007.
- Pentland, R.W. Picard, and S. Sclaroff. Photobook: Content-based manipulation of image databases. Int. J. Computer Vision, 18(3):233– 254, 1993.
- 9. Greg Pazz, Ramin Zabih and Justin Miller, "Region of Image Indexing System by DCT and Entropy," International Journal of Engineering Science and Technology, Vol. 8, No. 2, pp. 93-101, 2002.
- Anil K. Jain, Aditya Vailaya, Image retrieval using color and shape, Pattern Recognition, Volume 29, Issue 8, August 1996, Pages 1233-1244, ISSN 0031-3203,
- 11. Ryszard S. Choraś, Tomasz Andrysiak, Michał Choraś, Integrated color, retrieval" Pattern Analysis and Applications ,October 2007, Volume 10, Issue 4, pp 333-343.
- Prabhakar Sharma, Deepty Dubey: A Modified Color Averaging Technique for "Content based Image Retrieval:" International Journal of Computer Applications (0975 –8887) Volume 51– No.20, August 2012. pp 25-28.
- 13. A.Sri Nagesh, G.P.Saradhi Varma and A.Govardhan "A Novel Approach for Information Content Retrieval and Analysis of Bio-Images using Datamining techniques" IJCSI International Journal of Computer Science Issues, Vol. 9, Issue 6(2), November 2012 pp 464-473.

14. Chanda et al. "A Differentiation/enhancement edge detector and its properties', IEEE trans on System, Man and Cyberbetics, SMC-15., pp162-168(1985).

- 15. Sang-Mi Lee, Hee-Jung Bae and Sung-Hwan Jung, "Efficient Content based Image Retrieval Methods using Color & Texture," ETRI Journal, Vol. 20, No. 3, pp.272-283, 1998.
- Remco C. Veltkamp and Mirela Tanase, "Content Based Image Retrieval Systems: A Survey," International Journal of Engineering Science and Technology, Vol. 20, No. 5, pp. 1-62, 2002.
- 17. Design of Feature Extraction in Content Based Image Retrieval (CBIR) using Color and Texture, Swati V. Sakhare & Vrushali G. Nasre Dept. of Electronics Engg., Bapurao Deshmukh College of Engg., Sevagram, Wardha (India).
- Dr. Fuhui Long, Dr. Hongjiang Zhang and Prof. David Dagan Feng, "fundamentals of content-based image retrieval.J. Weszka, C. Dyer, and A. Rosenfeld. A comparative study of texture measures for terrain classification. IEEE Transactions on Systems, Man and Cybernetics, 6(4):269–285, 1976.
- P.s.suhasini, dr. k.sri Rama Krishna, dr. i. v. murali Krishna.S. Nandagopalan, Technology "cbir using color histogram processing" Journal of Theoretical and Applied Information Technology.
 A.Sri Nagesh, Dr.G.P.S.Varma, Dr A Govardhan, "An Improved iterative Watershed and Morphological Transformation Techniques for
- A.Sri Nagesh, Dr.G.P.S.Varma, Dr A Govardhan, "An Improved iterative Watershed and Morphological Transformation Techniques for Segmentation of Microarray Images", IJCA Special Issue on "Computer Aided Soft Computing Techniques for Imaging and Biomedical Applications" CASCT, Volume 2, 2010.PP 77-87, August 2010
- 21. Dr. B. S. Adiga, and N. Deepak, ", A Universal Model for Content-Based Image Retrieval" International Journal of Electrical and Computer Engineering, vol.4, no.4, 2009.
- 22. Armitage, L and Enser, P G B (1997) "Analysis of user need in image archives." Journal of Information Science, 23(4), 287-299.
- 23. Ey'up Sabri Konak, August, 2002."A content-based image retrieval system for texture and color queries", A thesis submitted to the department of computer engineering and the institute of engineering and science of bilkent university, By
- 24. A.Sri Nagesh, Dr.G.P.S.Varma, Dr.A.Govardhan, "Evaluating the performance of morphology segmentation on micro array spot images." IEEE Sponsored 2nd international conference on computing communication and networking technologies(ICCCNT)uly 2010.
- C. Nastar, M. Mitschke, C. Meilhac, and N. Boujemaa. Surfimage: a flexible content-based image retrieval system. In ACM Multimedia 98, pages 339–344, Bristol, UK, 1998.
- 26. E.L. van den Broek, L.G. Vuurpijl, P. Kisters and J.C.M. von Schmid Nijmegen, "Content Based Image Retrieval: Color Selection exploited," International Journal of Engineering Science and Technology, Vol. 30, No. 3, pp. 456-462.
- 27. B.S. Manjunath, J.-R. Ohm, V.V. Vasudevan, A. Yamada, Color and texture descriptors, IEEE Transactions on Circuit and Systems for Video Technology 11 (6) (2001) 703–715.
- F. Mahmoudi, J. Shanbehzadeh, et al., Image retrieval based on shape similarity by edge orientation autocorrelogram, Pattern Recognition 36 (8) (2003) 1725–1736.
- 29. D.G. Lowe, Distinctive image features from scale-invariant key points, International Journal of Computer Vision 60 (2) (2004) 91-110.
- 30. M. Banerjee, M.K. Kundu, Edge based features for content based image retrieval, Pattern Recognition 36 (11) (2003) 2649–2661.

 J. Luo, D. Crandall, Color object detection using spatial-color joint probability functions, IEEE Transactions on Image Processing 15 (6) (2006) 1443–1453.

Authors:M. N. Praphul, K. R. NatarajPaper Title:FPGA Implementation of Hybrid Cryptosystem

Abstract: With the development of Computer Network and Communication Technology, a great mass of data and information need to be exchanged by public communication networks. High efficiency and high safety of data transmission become much more important. There are several information encryption algorithms of which, Advanced Encryption Standard (AES) and Rivest Shamir Adleman (RSA) are widely used two algorithms of symmetric encryption technology and asymmetric encryption technology respectively. The existing symmetric scheme-AES algorithm provides high speed stream for large data and uses less amount of computer resources but induces less degree of security in large amount of data. The asymmetric cryptographic algorithm or a public key cryptographic

4. algorithm-RSA is more secure comparatively, as it has two keys one for encryption and another one for decryption, but is much slower and uses a huge amount of computer resources. In order to cope up with these short comings, a proposal to use an improved version of the hybrid encryption scheme is done, which is a combination of Advanced Encryption Standard (AES) and Rivest Shamir Adleman (RSA) with cross encrypted keys for secure key exchange and hybrid encryption for enhanced cipher-text security. This system is implemented on Spartan 3 FPGA using VHDL as the programing language.Synthesizing and implementation of the code is carried out on Xilinx -Project Navigator, ISE 12.1i suite.

Keywords: Advanced Encryption Standard (AES), FPGA, hybrid encryption, Rivest Shamir Adleman (RSA).

14-19

	References:		
	1. Ohyoung Son an	nd Jiho Kim "Compact Design of the Advanced Encryption Standard Algorithm for IEEE 802.15.4 Devices "Journal of	
	Electrical Engine	pering & Technology Vol. 6, 2013, ab Kele "Computer and Network Security on Public Key, Cruntography and PSA" May 15, 2013 Purdue University	
	3. N.Singh, G.Rai	"Security on bccn trough AES encryption technique". Special Issue of INTERNATIONAL journal of engineering science	
	& advanced tech	nology (2250–3676) Jul-Aug.2012.	
	4. Jeneba mary.B "	hybrid cryptography by the implementation of rsa and aes"international Journal of Current Research, Vol. 3, Issue, April,	
	2011 5 Alan Daly and V	Villiam Zhenzhen Liu "Implementation of AES Encryption based on FPGA" Modern electronic technology	
	6. Marnane "Effic	ient Architectures for implementing Montgomery Modular Multiplication and RSA Modular Exponentiation on	
	Reconfigurable	Logic"University College Cork Ireland 2010.	
	7. Yu; Tong Li; Na	Zhao; Fei Dai "Design and implementation of an improved RSA algorithm", April 2010	
	 Song J. Park UniversitCorvall 	Analysis of AES Hardware implementations. Department of Electrical & Computer Engineering Oregon State	
	9. Tim Good and M	Iohammed Benaissa. "AES on FPGA from the Fastest to the Smallest".	
	 Panu Hämäläine 	n, Marko Hännikäinen, Timo Hämäläinen, and Jukka Saarinen. "Hardware implementation of the improved wep and rc4	
	encryption algor	thms for wireless terminals",2010 Crimtogram Eng "Litilizing hard cores of modern EDGA devices for high performance crimtography" 2011	
	12. Benjamin Leper	they, Charles Hymans "FPGA implementation of the Rijndael algorithm" June 9, 2009	
	13. Shanxin Qu,Guochu Shou,Yihong Hu,Zhigang Guo,Zongjue Qian. "High Throughput Pipelined Implementation of AES on FPGA".		
	International Syn	nposium on Information Engineering and Electronic Commerce. 2009	
	14. Deniouz A.Folo	Ciprography and network security TATA Mcgraw initi publication 2007 edition.	
	Authors:	Oinam Suchitra Devi, Hemanth Kumar P, S. Basavaraj Patil	
	Paper Title:	Novel Compression Techniques for Time Series Signals	
	Abstract: A time	series signal can be defined as a sequence of data items which is measured through repeated	
	measurements ove	r uniform time intervals. Time series analysis comprises techniques for analyzing time series data	
	in order to obtain	meaningful statistics and other characteristics of the data transmission time. Compression is the	
	techniques of redu	ction in size of data in order to save space or transmission time. Wavelet compression technique is	
	a form of data co	mpression well defined for image compression. The design of time series signal compression	
	techniques involve	s trade-offs among various factors which includes the degree of compressing the data, the amount	
	of distortion introd	luced and the computational resources required to compress and decompress the time series data.	
	This paper analyz	zes different wavelet compression techniques like Wavelet Decomposition. Wavelet Packet.	
	Decimated Discre	te Wavelet, Fixed encoding, Huffman encoding and Novel Encoding Compression technique.	
	Analyzing this par	er discuss about novel approach for compressing time series signal. There exist several measures	
	to know the quality	y of the reconstructed time series signal after compression of signal data. The most popularly used	
	measured parameter	ers are Percentage Root mean square Difference (PRD). Peak Signal to Noise Ratio (PSNR) and	
	Maximal Absolute Difference (MAD) etc. From the results it is observed that Novel Compression Encoding		
	technique gives better performance in compression of time series signal as it achieve high PSNR with better quality		
	of compression, smaller PRD and MAD with less distortion compare to other compression techniques.		
	or compression, sinuler rand and maile with less distortion compare to other compression techniques.		
	5. Keywords: Decimated Discrete Wayalet Fixed encoding Huffman encoding Wayalet Decomposition Wayalet		
5.	Kouwanda, Dasin	noted Discrets Wayslet Fixed anading Unifman anading Wayslet Decomposition Wayslet	20.25
5.	Keywords: Decin	nated Discrete Wavelet, Fixed encoding, Huffman encoding, Wavelet Decomposition, Wavelet	20-25
5.	Keywords: Decin Packet.	nated Discrete Wavelet, Fixed encoding, Huffman encoding, Wavelet Decomposition, Wavelet	20-25
5.	Keywords: Decin Packet.	nated Discrete Wavelet, Fixed encoding, Huffman encoding, Wavelet Decomposition, Wavelet	20-25
5.	Keywords: Decin Packet. References: 1. Goudarzi, M.M.	nated Discrete Wavelet, Fixed encoding, Huffman encoding, Wavelet Decomposition, Wavelet and Moradi, H. M., 2005, "Electrocardiogramsignal compression Using multiwavelet transform," Transactions on	20-25
5.	Keywords: Decin Packet. References: 1. Goudarzi, M.M, Engineering, Con	nated Discrete Wavelet, Fixed encoding, Huffman encoding, Wavelet Decomposition, Wavelet and Moradi, H. M., 2005, "Electrocardiogramsignal compression Using multiwavelet transform," Transactions on uputing and Technology.	20-25
5.	Keywords: Decin Packet. References: 1. Goudarzi, M.M, Engineering, Con 2. Benzid, R., Marin cignela, "Internet	nated Discrete Wavelet, Fixed encoding, Huffman encoding, Wavelet Decomposition, Wavelet and Moradi, H. M., 2005, "Electrocardiogramsignal compression Using multiwavelet transform," Transactions on iputing and Technology. , F., and Bouguechal, N. E., 2006, "Qualitycontrolled compression method using wavelet transform for electrocardiogram conclusions of Bouguechal, N. E., 2006, "Qualitycontrolled compression method using wavelet transform for electrocardiogram	20-25
5.	Keywords: Decin Packet. References: 1. Goudarzi, M.M, Engineering, Con 2. Benzid, R., Marin signals," Internati 3. Benzid, R., Marin	and Moradi, H. M., 2005, "Electrocardiogramsignal compression Using multiwavelet transform," Transactions on uputing and Technology. , F., and Bouguechal, N. E., 2006, "Qualitycontrolled compression method using wavelet transform for electrocardiogram onal Journal of Biomedical Science. , F., Benyoucef, M., and Arar, D., 2003, "Fixed percentage of wavelet coefficients to be zeroed for ECG compression	20-25
5.	Keywords: Decin Packet. References: 1. Goudarzi, M.M, Engineering, Con 2. Benzid, R., Marin signals," Internati 3. Benzid, R., Marin "Electronics Letter	nated Discrete Wavelet, Fixed encoding, Huffman encoding, Wavelet Decomposition, Wavelet and Moradi, H. M., 2005, "Electrocardiogramsignal compression Using multiwavelet transform," Transactions on puting and Technology. , F., and Bouguechal, N. E., 2006, "Qualitycontrolled compression method using wavelet transform for electrocardiogram onal Journal of Biomedical Science. ; F., Benyoucef, M., and Arar, D., 2003, "Fixed percentage of wavelet coefficients to be zeroed for ECG compression rs Vol 39 No 11.	20-25
5.	Keywords: Decin Packet. References: 1. Goudarzi, M.M., Engineering, Con 2. Benzid, R., Marin signals," Internati 3. Benzid, R., Marin "Electronics Lette 4. Bell, T.C., Cleary, J.	nated Discrete Wavelet, Fixed encoding, Huffman encoding, Wavelet Decomposition, Wavelet and Moradi, H. M., 2005, "Electrocardiogramsignal compression Using multiwavelet transform," Transactions on puting and Technology. , F., and Bouguechal, N. E., 2006, "Qualitycontrolled compression method using wavelet transform for electrocardiogram onal Journal of Biomedical Science. ; F., Benyoucef, M., and Arar, D., 2003, "Fixed percentage of wavelet coefficients to be zeroed for ECG compression rs Vol 39 No 11. .G., W., Written, I.H., Text Compression, (Prentice Hall, Englewood Cliffs(1990)).	20-25
5.	Keywords: Decin Packet. References: 1. Goudarzi, M.M, Engineering, Con 2. Benzid, R., Marir signals," Internati 3. Benzid, R., Marir "Electronics Lette 4. Bell, T.C., Cleary, J. 5. Donoho, D.L., Vet 6. H.C. Liu and G.L.	 and Moradi, H. M., 2005, "Electrocardiogramsignal compression Using multiwavelet transform," Transactions on puting and Technology. F., and Bouguechal, N. E., 2006, "Qualitycontrolled compression method using wavelet transform for electrocardiogram onal Journal of Biomedical Science. F., Benyoucef, M., and Arar, D., 2003, "Fixed percentage of wavelet coefficients to be zeroed for ECG compression rs Vol 39 No 11. G.,W.,Written,I.H.,Text Compression,(Prentice Hall,Englewood Cliffs(1990)). erli,M.,Devore,RA.,Daubechies,I.,"Data Compression and Harmonic Analysis", IEEE Trans. Inf. Theory. Zick "Automatic determination of scene changesnin MPEG compressed video "in Proc.ISCAS –IEEE Int. Symp.Circuits 	20-25
5.	Keywords: Decin Packet. References: 1. Goudarzi, M.M, Engineering, Con 2. Benzid, R., Marir signals," Internati 3. Benzid, R., Marin "Electronics Lette 4. Bell, T.C., Cleary, J 5. Donoho, D.L., Vet 6. H.C.Liu and G.L. and System, 1995.	nated Discrete Wavelet, Fixed encoding, Huffman encoding, Wavelet Decomposition, Wavelet and Moradi, H. M., 2005, "Electrocardiogramsignal compression Using multiwavelet transform," Transactions on uputing and Technology. , F., and Bouguechal, N. E., 2006, "Qualitycontrolled compression method using wavelet transform for electrocardiogram onal Journal of Biomedical Science. ; F., Benyoucef, M., and Arar, D., 2003, "Fixed percentage of wavelet coefficients to be zeroed for ECG compression rs Vol 39 No 11. G.,W., Written,I.H.,Text Compression,(Prentice Hall,Englewood Cliffs(1990)). erli,M.,Devore,RA.,Daubechies,I.,"Data Compression and Harmonic Analysis", IEEE Trans . Inf. Theory. Zick ,"Automatic determination of scene changesnin MPEG compressed video,"in Proc.ISCAS –IEEE Int .Symp.Circuits	20-25
5.	Keywords: Decin Packet. References: 1. Goudarzi, M.M, Engineering, Con 2. Benzid, R., Marin signals," Internati 3. Benzid, R., Marin "Electronics Lette 4. Bell, T.C., Cleary, J 5. Donoho, D.L., Vet 6. H.C.Liu and G.L. and System, 1995. 7. J. M. Shapiro. Em	nated Discrete Wavelet, Fixed encoding, Huffman encoding, Wavelet Decomposition, Wavelet and Moradi, H. M., 2005, "Electrocardiogramsignal compression Using multiwavelet transform," Transactions on uputing and Technology. , F., and Bouguechal, N. E., 2006, "Qualitycontrolled compression method using wavelet transform for electrocardiogram onal Journal of Biomedical Science. , F., Benyoucef, M., and Arar, D., 2003, "Fixed percentage of wavelet coefficients to be zeroed for ECG compression rs Vol 39 No 11. .G.,W.,Written,I.H.,Text Compression,(Prentice Hall,Englewood Cliffs(1990)). erli,M.,Devore,RA.,Daubechies,I.,"Data Compression and Harmonic Analysis", IEEE Trans . Inf. Theory. Zick ,"Automatic determination of scene changesnin MPEG compressed video,"in Proc.ISCAS –IEEE Int .Symp.Circuits bedded image coding using zerotrees of wavelet coefficients .IEEE Trans. Signal Processing.	20-25
5.	Keywords: Decin Packet. References: 1. Goudarzi, M.M, Engineering, Con 2. Benzid, R., Marin signals," Internati 3. Benzid, R., Marin "Electronics Lette 4. Bell,T.C.,Cleary,J 5. Donoho,D.L.,Vet 6. H.C.Liu and G.L. and System,1995. 7. J. M. Shapiro. En 8. D. Sinha and A. 7 9. R. Baraniuk, On	 nated Discrete Wavelet, Fixed encoding, Huffman encoding, Wavelet Decomposition, Wavelet and Moradi, H. M., 2005, "Electrocardiogramsignal compression Using multiwavelet transform," Transactions on puting and Technology. F., and Bouguechal, N. E., 2006, "Qualitycontrolled compression method using wavelet transform for electrocardiogram onal Journal of Biomedical Science. F., Benyoucef, M., and Arar, D., 2003, "Fixed percentage of wavelet coefficients to be zeroed for ECG compression rs Vol 39 No 11. G.,W.,Written,I.H.,Text Compression,(Prentice Hall,Englewood Cliffs(1990)). erli,M.,Devore,R.A.,Daubechies,I.,"Data Compression and Harmonic Analysis", IEEE Trans . Inf. Theory. Zick ,"Automatic determination of scene changesnin MPEG compressed video,"in Proc.ISCAS –IEEE Int .Symp.Circuits bedded image coding using zerotrees of wavelet coefficients .IEEE Trans. Signal Processing. ewfik. Low bit rate transparent audio compression using adapted wavelets. IEEE Trans. Signal Processing, 1993. timal tree approximation using wavelets. In A. J. Aldroubi and M. Unser. editors. Wavelet Applications in Signal 	20-25
5.	Keywords: Decin Packet. References: 1. Goudarzi, M.M., Engineering, Con 2. Benzid, R., Marin signals," Internati 3. Benzid, R., Marin "Electronics Lette 4. Bell,T.C.,Cleary,J 5. Donoho,D.L.,Vet 6. H.C.Liu and G.L. and System,1995. 7. J. M. Shapiro. En 8. D. Sinha and A. T 9. R. Baraniuk. Op Processing, volun	 nated Discrete Wavelet, Fixed encoding, Huffman encoding, Wavelet Decomposition, Wavelet and Moradi, H. M., 2005, "Electrocardiogramsignal compression Using multiwavelet transform," Transactions on puting and Technology. F., and Bouguechal, N. E., 2006, "Qualitycontrolled compression method using wavelet transform for electrocardiogram onal Journal of Biomedical Science. F., Benyoucef, M., and Arar, D., 2003, "Fixed percentage of wavelet coefficients to be zeroed for ECG compression rs Vol 39 No 11. G.,W., Written, I.H., Text Compression, (Prentice Hall, Englewood Cliffs(1990)). erti, M., Devore, R.A., Daubechies, I., "Data Compression and Harmonic Analysis", IEEE Trans . Inf. Theory. Zick , "Automatic determination of scene changesnin MPEG compressed video, "in Proc.ISCAS –IEEE Int .Symp.Circuits bedded image coding using zerotrees of wavelet coefficients. IEEE Trans. Signal Processing. ewfik. Low bit rate transparent audio compression using adapted wavelets. IEEE Trans. Signal Processing, 1993. timal tree approximation using wavelets. In A. J. Aldroubi and M. Unser, editors, Wavelet Applications in Signal processing to VII, pages 196–207. SPIE, 1999. 	20-25
5.	Keywords: Decin Packet. References: 1. Goudarzi, M.M, Engineering, Con 2. Benzid, R., Marin signals," Internati 3. Benzid, R., Marin "Electronics Lette 4. Bell, T.C., Cleary, J. 5. Donoho, D.L., Vet 6. H.C.Liu and G.L. and System, 1995. 7. J. M. Shapiro. En 8. D. Sinha and A. T 9. R. Baraniuk. Op Processing, volum 10. Blelloch, E., 2002	 nated Discrete Wavelet, Fixed encoding, Huffman encoding, Wavelet Decomposition, Wavelet and Moradi, H. M., 2005, "Electrocardiogramsignal compression Using multiwavelet transform," Transactions on puting and Technology. F., and Bouguechal, N. E., 2006, "Qualitycontrolled compression method using wavelet transform for electrocardiogram onal Journal of Biomedical Science. F., Benyoucef, M., and Arar, D., 2003, "Fixed percentage of wavelet coefficients to be zeroed for ECG compression rs Vol 39 No 11. G.,W.,Written,I.H.,Text Compression, (Prentice Hall,Englewood Cliffs(1990)). erli,M.,Devore,RA.,Daubechies,I.,"Data Compression and Harmonic Analysis", IEEE Trans . Inf. Theory. Zick ,"Automatic determination of scene changesnin MPEG compressed video," in Proc.ISCAS –IEEE Int .Symp.Circuits bedded image coding using zerotrees of wavelet coefficients. IEEE Trans. Signal Processing. ewfik. Low bit rate transparent audio compression using adapted wavelets. IEEE Trans. Signal Processing, 1993. timal tree approximation using wavelets. In A. J. Aldroubi and M. Unser, editors, Wavelet Applications in Signal to VI, pages 196–207. SPIE, 1999. Introduction to Data Compression, Computer Science Department, Carnegie Mellon University. 	20-25
5.	 Keywords: Decin Packet. References: Goudarzi, M.M, Engineering, Con Benzid, R., Marir signals," Internati Benzid, R., Marir "Electronics Lettic Bell, T.C., Cleary, J Donoho, D.L., Vet H.C.Liu and G.L. and System, 1995. J. M. Shapiro. En D. Sinha and A. T R. Baraniuk. Op Processing, volum Belloch, E., 2002 Phillips, Dwayne, Al-Nashash, H. A 	 hated Discrete Wavelet, Fixed encoding, Huffman encoding, Wavelet Decomposition, Wavelet and Moradi, H. M., 2005, "Electrocardiogramsignal compression Using multiwavelet transform," Transactions on puting and Technology. F., and Bouguechal, N. E., 2006, "Qualitycontrolled compression method using wavelet transform for electrocardiogram onal Journal of Biomedical Science. F., Benyoucef, M., and Arar, D., 2003, "Fixed percentage of wavelet coefficients to be zeroed for ECG compression rs Vol 39 No 11. G.,W.,Written,I.H.,Text Compression,(Prentice Hall,Englewood Cliffs(1990)). erti,M.,Devore,RA.,Daubechies,I., "Data Compression and Harmonic Analysis", IEEE Trans . Inf. Theory. Zick ,"Automatic determination of scene changesnin MPEG compressed video,"in Proc.ISCAS –IEEE Int .Symp.Circuits bedded image coding using zerotrees of wavelet coefficients .IEEE Trans. Signal Processing. ewfik. Low bit rate transparent audio compression using adapted wavelets. IEEE Trans. Signal Processing, 1993. timal tree approximation using wavelets. In A. J. Aldroubi and M. Unser, editors, Wavelet Applications in Signal ev VI, pages 196–207. SPIE, 1999. Introduction to Data Compression, Computer Science Department, Carnegie Mellon University. "LZW Data Compression, "The Computer Applications Journal, Circuit Cellar Ink, vol. 27, June/July 1992. M., 1994, "ECG data compression using adaptive Fourier coefficients estimation", Med. Eng. Phys., Vol. 16. 	20-25
5.	Keywords: Decin Packet. References: 1. Goudarzi, M.M, Engineering, Con 2. Benzid, R., Marir signals," Internati "Electronics Lette 4. Bell, T.C., Cleary, J 5. Donoho, D.L., Vet 6. H.C.Liu and G.L. and System, 1995. 7. J. M. Shapiro. En 8. D. Sinha and A. T 9. R. Baraniuk. Op Processing, volun 10. Blelloch, E., 2002 11. Phillips, Dwayne, 12. Al-Nashash, H. A	 hated Discrete Wavelet, Fixed encoding, Huffman encoding, Wavelet Decomposition, Wavelet and Moradi, H. M., 2005, "Electrocardiogramsignal compression Using multiwavelet transform," Transactions on puting and Technology. F., and Bouguechal, N. E., 2006, "Qualitycontrolled compression method using wavelet transform for electrocardiogram onal Journal of Biomedical Science. F., Benyoucef, M., and Arar, D., 2003, "Fixed percentage of wavelet coefficients to be zeroed for ECG compression rs Vol 39 No 11. G.,W.,Written,I.H.,Text Compression,(Prentice Hall,Englewood Cliffs(1990)). erli, M.,Devore, R.A.,Daubechies, L., "Data Compression and Harmonic Analysis", IEEE Trans. Inf. Theory. Zick ,"Automatic determination of scene changesnin MPEG compressed video,"in Proc.ISCAS –IEEE Int. Symp.Circuits bedded image coding using zerotrees of wavelet coefficients. IEEE Trans. Signal Processing, 1993. timal tree approximation using wavelets. In A. J. Aldroubi and M. Unser, editors, Wavelet Applications in Signal ev VI, pages 196–207. SPIE, 1999. Introduction to Data Compression, Computer Science Department, Carnegie Mellon University. "LZW Data Compression, "The Computer Applications Journal, Circuit Cellar Ink, vol. 27, June/July 1992. M., 1994, "ECG data compression using adaptive Fourier coefficients estimation", Med. Eng. Phys., Vol. 16. 	20-25
5.	Keywords: Decin Packet. References: 1. Goudarzi, M.M, Engineering, Con 2. Benzid, R., Marin signals," Internati 3. Benzid, R., Marin "Electronics Lette 4. Bell, T.C., Cleary, J. 5. Donoho, D.L., Vet 6. H.C.Liu and G.L. and System, 1995. 7. J. M. Shapiro. En 8. D. Sinha and A. T 9. R. Baraniuk. Op Processing, volun 10. Blelloch, E., 2002 11. Phillips, Dwayne, 12. Al-Nashash, H. A Authors:	hated Discrete Wavelet, Fixed encoding, Huffman encoding, Wavelet Decomposition, Wavelet and Moradi, H. M., 2005, "Electrocardiogramsignal compression Using multiwavelet transform," Transactions on uputing and Technology. , F., and Bouguechal, N. E., 2006, "Qualitycontrolled compression method using wavelet transform for electrocardiogram onal Journal of Biomedical Science. , F. Benyoucef, M., and Arar, D., 2003, "Fixed percentage of wavelet coefficients to be zeroed for ECG compression rs Vol 39 No 11. G.,W.,Written,I.H., Text Compression, (Prentice Hall,Englewood Cliffs(1990)). etil,M.,Devore,RA.,Daubechies,I., "Data Compression and Harmonic Analysis", IEEE Trans . Inf. Theory. Zick ,"Automatic determination of scene changesnin MPEG compressed video, "in Proc.ISCAS –IEEE Int .Symp.Circuits bedded image coding using zerotrees of wavelet coefficients .IEEE Trans. Signal Processing. ewfik. Low bit rate transparent audio compression using adapted wavelets. IEEE Trans. Signal Processing. ewfik. Low bit rate transparent audio compression using adapted wavelets. IEEE Trans. Signal Processing. 1. Introduction to Data Compression, Computer Science Department, Carnegie Mellon University. "LZW Data Compression, "The Computer Science Department, Carnegie Mellon University. "LZW Data Compression, using adaptive Fourier coefficients estimation", Med. Eng. Phys., Vol. 16. Prajakta K. Sarolkar, Meghna Nagori	20-25
5.	Keywords: Decin Packet. References: 1. Goudarzi, M.M, Engineering, Con 2. Benzid, R., Marir signals," Internati 3. Benzid, R., Marir "Electronics Lette 4. Bell, T.C., Cleary, J. 5. Donoho, D.L., Vet 6. H.C.Liu and G.L. and System, 1995. 7. J. M. Shapiro. En 8. D. Sinha and A. T 9. R. Baraniuk. Op Processing, volun 10. Blelloch, E., 2002 11. Phillips, Dwayne, 12. Al-Nashash, H. A Authors: Paper Title:	 hated Discrete Wavelet, Fixed encoding, Huffman encoding, Wavelet Decomposition, Wavelet and Moradi, H. M., 2005, "Electrocardiogramsignal compression Using multiwavelet transform," Transactions on puting and Technology. F., and Bouguechal, N. E., 2006, "Qualitycontrolled compression method using wavelet transform for electrocardiogram onal Journal of Biomedical Science. F., Benyoucef, M., and Arar, D., 2003, "Fixed percentage of wavelet coefficients to be zeroed for ECG compression rs Vol 39 No 11. G.W., Written, I.H., Text Compression, (Prentice Hall, Englewood Cliffs(1990)). erli, M., Devore, R.A., Daubechies, I., "Data Compression and Harmonic Analysis", IEEE Trans. Inf. Theory. Zick , "Automatic determination of scene changesnin MPEG compressed video,"in Proc.ISCAS –IEEE Int .Symp.Circuits bedded image coding using zerotrees of wavelet coefficients. IEEE Trans. Signal Processing, 1993. timal tree approximation using wavelets. In A. J. Aldroubi and M. Unser, editors, Wavelet Applications in Signal ev VII, pages 196–207. SPIE, 1999. Introduction to Data Compression, Computer Science Department, Carnegie Mellon University. "LZW Data Compression," The Computer Applications Journal, Circuit Cellar Ink, vol. 27, June/July 1992. M., 1994, "ECG data compression using adaptive Fourier coefficients estimation", Med. Eng. Phys., Vol. 16. 	20-25 elation
5.	 Keywords: Decin Packet. References: Goudarzi, M.M, Engineering, Con Benzid, R., Marir signals," Internati Benzid, R., Marir "Electronics Lette Bell, T.C., Cleary, J Donoho, D.L., Vet H.C.Liu and G.L. and System, 1995. J. M. Shapiro. En D. Sinha and A. T R. Baraniuk. Op Processing, volun Blelloch, E., 2002 Phillips, Dwayne, Al-Nashash, H. A Authors: Paper Title: 	 hated Discrete Wavelet, Fixed encoding, Huffman encoding, Wavelet Decomposition, Wavelet and Moradi, H. M., 2005, "Electrocardiogramsignal compression Using multiwavelet transform," Transactions on puting and Technology. F., and Bouguechal, N. E., 2006, "Qualitycontrolled compression method using wavelet transform for electrocardiogram onal Journal of Biomedical Science. F., Benyoucef, M., and Arar, D., 2003, "Fixed percentage of wavelet coefficients to be zeroed for ECG compression rs Vol 39 No 11. G.W., Written, I.H., Text Compression, (Prentice Hall, Englewood Cliffs(1990)). erli, M., Devore, RA., Daubechies, I., "Data Compression and Harmonic Analysis", IEEE Trans . Inf. Theory. Zick, "Automatic determination of scene changesnin MPEG compressed video," in Proc.ISCAS –IEEE Int .Symp.Circuits bedded image coding using zerotrees of wavelet coefficients. IEEE Trans. Signal Processing. ewfik. Low bit rate transparent audio compression using adapted wavelets. IEEE Trans. Signal Processing. 1993. imal tree approximation using wavelets. In A. J. Aldroubi and M. Unser, editors, Wavelet Applications in Signal to VII, pages 196–207. SPIE, 1999. Introduction to Data Compression, Computer Science Department, Carnegie Mellon University. "LZW Data Compression," The Computer Applications Journal, Circuit Cellar Ink, vol. 27, June/July 1992. M., 1994, "ECG data compress Social Media Sites Using Association Rule Mining Based on Autocorrent, traibuted Web data contains rich and diverse information about a variety of events in the physical 	20-25
5.	 Keywords: Decin Packet. References: Goudarzi, M.M, Engineering, Con Benzid, R., Marir signals," Internati Benzid, R., Marir "Electronics Lette Bell, T.C., Cleary, J Donoho, D.L., Vet H.C.Liu and G.L. and System, 1995. J. M. Shapiro. En D. Sinha and A. T R. Baraniuk. Op Processing, volun Belloch, E., 2002 Phillips, Dwayne, Al-Nashash, H. A Authors: Paper Title: Abstract: User-co world, such as shore 	 hated Discrete Wavelet, Fixed encoding, Huffman encoding, Wavelet Decomposition, Wavelet and Moradi, H. M., 2005, "Electrocardiogramsignal compression Using multiwavelet transform," Transactions on puting and Technology. F., and Bouguechal, N. E., 2006, "Qualitycontrolled compression method using wavelet transform for electrocardiogram onal Journal of Biomedical Science. F., Benyoucef, M., and Arar, D., 2003, "Fixed percentage of wavelet coefficients to be zeroed for ECG compression rs Vol 39 No 11. G.,W., Written, I.H., Text Compression, (Prentice Hall, Englewood Cliffs(1990)). erli,M., Devore, RA., Daubechies, I., "Data Compression and Harmonic Analysis", IEEE Trans . Inf. Theory. Zick, "Automatic determination of scene changesnin MPEG compressed video," in Proc.ISCAS –IEEE Int .Symp.Circuits bedded image coding using zerotrees of wavelet coefficients .IEEE Trans. Signal Processing. ewfik. Low bit rate transparent audio compression using adapted wavelets. IEEE Trans. Signal Processing, 1993. timal tree approximation using wavelets. In A. J. Aldroubi and M. Unser, editors, Wavelet Applications in Signal to VII, pages 196–207. SPIE, 1999. Introduction to Data Compression, Computer Science Department, Carnegie Mellon University. "LZW Data Compression," The Computer Applications Journal, Circuit Cellar Ink, vol. 27, June/July 1992. M., 1994, "ECG data compression using adaptive Fourier coefficients estimation", Med. Eng. Phys., Vol. 16. Prajakta K. Sarolkar, Meghna Nagori Planned Events Across Social Media Sites Using Association Rule Mining Based on Autocorre ntributed Web data contains rich and diverse information about a variety of events in the physical ws, festivals, conferences and more. This information ranges from known event features (e.g., title. 	20-25
5.	Keywords: Decin Packet. References: 1. Goudarzi, M.M, Engineering, Con 2. Benzid, R., Marir signals," Internati 3. Benzid, R., Marin "Electronics Lette 4. Bell, T.C., Cleary, J 5. Donoho, D.L., Vet 6. H.C.Liu and G.L. and System, 1995. 7. J. M. Shapiro. En 8. D. Sinha and A. T 9. R. Baraniuk. Op Processing, volun 10. Blelloch, E., 2002 11. Phillips, Dwayne, 12. Al-Nashash, H. A Authors: Paper Title: Abstract: User-co world, such as sho time, location) po	 hated Discrete Wavelet, Fixed encoding, Huffman encoding, Wavelet Decomposition, Wavelet and Moradi, H. M., 2005, "Electrocardiogramsignal compression Using multiwavelet transform," Transactions on puting and Technology. F., and Bouguechal, N. E., 2006, "Qualitycontrolled compression method using wavelet transform for electrocardiogram onal Journal of Biomedical Science. F., Benyoucef, M., and Arar, D., 2003, "Fixed percentage of wavelet coefficients to be zeroed for ECG compression rs Vol 39 No 11. G.,W., Written, I.H., Text Compression, (Prentice Hall, Englewood Cliffs(1990)). etil, M., Devore, R.A., Daubechies, I., "Data Compression and Harmonic Analysis", IEEE Trans. Inf. Theory. Zick ,"Automatic determination of scene changesnin MPEG compressed video,"in Proc.ISCAS –IEEE Int. Symp.Circuits bedded image coding using zerotrees of wavelet coefficients. IEEE Trans. Signal Processing, 1993. timal tree approximation using wavelets. In A. J. Aldroubi and M. Unser, editors, Wavelet Applications in Signal to VII, pages 196–207. SPIE, 1999. Introduction to Data Compression, Computer Science Department, Carnegie Mellon University. "LZW Data Compression," The Computer Applications Journal, Circuit Cellar Ink, vol. 27, June/July 1992. M. 1994, "ECG data compression using adaptive Fourier coefficients estimation", Med. Eng. Phys., Vol. 16. Prajakta K. Sarolkar, Meghna Nagori Planned Events Across Social Media Sites Using Association Rule Mining Based on Autocorrentributed Web data contains rich and diverse information about a variety of events in the physical ws, festivals, conferences and more. This information ranges from known event features (e.g., title, sted on event aggregation platforms (e.g., Event Brite, Face book events) to discussions and 	20-25 elation
5.	 Keywords: Decin Packet. References: Goudarzi, M.M, Engineering, Con Benzid, R., Marin signals," Internati Benzid, R., Marin "Electronics Lette Bell, T.C., Cleary, J. Donoho, D.L., Vet H.C.Liu and G.L. and System, 1995. J. M. Shapiro. En D. Sinha and A. T R. Baraniuk. Op Processing, volun Blelloch, E., 2002 Phillips, Dwayne, Al-Nashash, H. A Authors: Paper Title: Abstract: User-co world, such as shor time, location) po reactions related to	 hated Discrete Wavelet, Fixed encoding, Huffman encoding, Wavelet Decomposition, Wavelet and Moradi, H. M., 2005, "Electrocardiogramsignal compression Using multiwavelet transform," Transactions on puting and Technology. F., and Bouguechal, N. E., 2006, "Qualitycontrolled compression method using wavelet transform for electrocardiogram onal Journal of Biomedical Science. F. Benyoucef, M., and Arar, D., 2003, "Fixed percentage of wavelet coefficients to be zeroed for ECG compression rs Vol 39 No 11. G.,W., Written, I.H., Text Compression, (Prentice Hall, Englewood Cliffs(1990)). erli, M., Devore, RA., Daubechies, I., "Data Compression and Harmonic Analysis", IEEE Trans. Inf. Theory. Zick, "Automatic determination of scene changesnin MPEG compressed video, "in Proc.ISCAS – IEEE Int. Symp.Circuits bedded image coding using zerotrees of wavelet coefficients. IEEE Trans. Signal Processing, 1993. timal tree approximation using wavelets. In A. J. Aldroubi and M. Unser, editors, Wavelet Applications in Signal tee VII, pages 196–207. SPIE, 1999. Introduction to Data Compression, Computer Science Department, Carnegie Mellon University. "LZW Data Compression, Computer Applications Journal, Circuit Cellar Ink, vol. 27, June/July 1992. M. 1994, "ECG data compression using adaptive Fourier coefficients estimation", Med. Eng. Phys., Vol. 16. Prajakta K. Sarolkar, Meghna Nagori Planned Events Across Social Media Sites Using Association Rule Mining Based on Autocorre ntributed Web data contains rich and diverse information about a variety of events in the physical ws, festivals, conferences and more. This information ranges from known event features (e.g., title, sted on event aggregation platforms (e.g., Event Brite, Face book events) to discussions and o events shared on different social media sites (e.g., Twitter, YouTube, Flickr). In this paper, we	20-25 elation
5.	 Keywords: Decin Packet. References: Goudarzi, M.M, Engineering, Con Benzid, R., Marin signals," Internati Benzid, R., Marin "Electronics Lette Bell, T.C., Cleary, J. Donoho, D.L., Vet H.C.Liu and G.L. and System, 1995. J. M. Shapiro. En D. Sinha and A. T R. Baraniuk. Op Processing, volun Blelloch, E., 2002 Phillips, Dwayne, Al-Nashash, H. A Authors: Paper Title: Abstract: User-co world, such as sho time, location) por reactions related to propose the challer	nated Discrete Wavelet, Fixed encoding, Huffman encoding, Wavelet Decomposition, Wavelet and Moradi, H. M., 2005, "Electrocardiogramsignal compression Using multiwavelet transform," Transactions on puting and Technology. , F., and Bouguechal, N. E., 2006, "Qualitycontrolled compression method using wavelet transform for electrocardiogram onal Journal of Biomedical Science. , F., Benyoucef, M., and Arar, D., 2003, "Fixed percentage of wavelet coefficients to be zeroed for ECG compression rs Vol 39 No 11. .G.W., Written, I.H., Text Compression, (Prentice Hall,Englewood Cliffs(1990)). erli,M.,Devore,RA.,Daubechies,I., "Data Compression and Harmonic Analysis", IEEE Trans . Inf. Theory. Zick, "Automatic determination of scene changesnin MPEG compressed video,"in Proc.ISCAS –IEEE Int .Symp.Circuits bedded image coding using zerotrees of wavelet coefficients .IEEE Trans. Signal Processing, 1993. timal tree approximation using wavelets. In A. J. Aldroubi and M. Unser, editors, Wavelet Applications in Signal te VII, pages 196–207. SPIE, 1999. . Introduction to Data Compression, Computer Science Department, Carnegie Mellon University. "LZW Data Compression, "The Computer Applications Journal, Circuit Cellar Ink, vol. 27, June/July 1992. .M., 1994, "ECG data compression using adaptive Fourier coefficients estimation", Med. Eng. Phys., Vol. 16. Prajakta K. Sarolkar, Meghna Nagori Planned Events Across Social Media Sites Using Association Rule Mining Based on Autocorre ntributed Web data contains rich and diverse information about a variety of events in the physical ws, festivals, conferences and more. This information ranges from known event features (e.g., title, sted on event aggregation platforms (e.g. Event Brite, Face book events) to discussions and o events shared on different social media sites (e.g., Twitter, YouTube, Flickr). In this paper, we uge of automatically identifying user-contributed content for events that are planned and, therefore.	20-25
5.	 Keywords: Decin Packet. References: Goudarzi, M.M, Engineering, Con Benzid, R., Marir signals," Internati Benzid, R., Marir "Electronics Letted Bell, T.C., Cleary,J Donoho, D.L., Vet H.C.Liu and G.L. and System, 1995. J. M. Shapiro. En D. Sinha and A. T R. Baraniuk. Op Processing, volun Blelloch, E., 2002 Phillips, Dwayne, Al-Nashash, H. A Authors: Paper Title: Abstract: User-co world, such as sho' time, location) po reactions related to propose the challer known in advance,	nated Discrete Wavelet, Fixed encoding, Huffman encoding, Wavelet Decomposition, Wavelet and Moradi, H. M., 2005, "Electrocardiogramsignal compression Using multiwavelet transform," Transactions on puting and Technology. F., and Bouguechal, N. E., 2006, "Qualitycontrolled compression method using wavelet transform for electrocardiogram onal Journal of Biomedical Science. , F., Benyoucef, M., and Arar, D., 2003, "Fixed percentage of wavelet coefficients to be zeroed for ECG compression rs Vol 39 No 11. .G.,W.,Witten, I.H., Text Compression, (Prentice Hall, Englewood Cliffs(1990)). erli, M., Devore, R.A., Daubechies, I., "Data Compression and Harmonic Analysis", IEEE Trans . Inf. Theory. Zick, "Automatic determination of scene changesnin MPEG compressed video," in Proc.ISCAS –IEEE Int .Symp.Circuits bedded image coding using zerotrees of wavelet coefficients. IEEE Trans. Signal Processing, 1993. timal tree approximation using wavelets. In A. J. Aldroubi and M. Unser, editors, Wavelet Applications in Signal te VII, pages 196–207. SPIE, 1999. . httroduction to Data Compression, Computer Science Department, Carnegie Mellon University. "LZW Data Compression, Computer Science Department, Carnegie Mellon University. "LZW Data Compression, Using adaptive Fourier coefficients estimation", Med. Eng. Phys., Vol. 16. Prajakta K. Sarolkar, Meghna Nagori Planned Events Across Social Media Sites Using Association Rule Mining Based on Autocorre ntributed Web data contains rich and diverse information about a variety of events in the physical ws, festivals, conferences and more. This information ranges from known event features (e.g., title, sted on event aggregation platforms (e.g. Event Brite, Face book events) to discussions and o events shared on different social media sites (e.g., Twitter, YouTube, Flickr). In this paper, we ge of automatically identifying user-contributed content for events that are planned and, therefore, across different social media sites. We mine event aggregation platforms to extract event feature	20-25
5.	 Keywords: Decin Packet. References: Goudarzi, M.M, Engineering, Con Benzid, R., Marir signals," Internati Benzid, R., Marir "Electronics Lette Bell, T.C., Cleary, J. Donoho, D.L., Vet H.C.Liu and G.L. and System, 1995. J. M. Shapiro. En D. Sinha and A. T R. Baraniuk. Op Processing, volun Blelloch, E., 2002 Phillips, Dwayne, Al-Nashash, H. A Authors: Paper Title: Abstract: User-co world, such as shoo time, location) po reactions related to propose the challen known in advance, which are often no	nated Discrete Wavelet, Fixed encoding, Huffman encoding, Wavelet Decomposition, Wavelet and Moradi, H. M., 2005, "Electrocardiogramsignal compression Using multiwavelet transform," Transactions on puting and Technology. F., and Bouguechal, N. E., 2006, "Qualitycontrolled compression method using wavelet transform for electrocardiogram onal Journal of Biomedical Science. , F., Benyoucef, M., and Arar, D., 2003, "Fixed percentage of wavelet coefficients to be zeroed for ECG compression rs Vol 39 No 11. .G.,W.,Written,I.H.,Text Compression,(Prentice Hall,Englewood Cliffs(1990)). erli,M.,Devore,RA,,Daubechies,I.,"Data Compression and Harmonic Analysis", IEEE Trans . Inf. Theory. Zick ,"Automatic determination of scene changesnin MPEG compressed video,"in Proc.ISCAS –IEEE Int. Symp.Circuits bedded image coding using zerotrees of wavelets. IEEE Trans. Signal Processing, ewfik. Low bit rate transparent audio compression using adapted wavelets. IEEE Trans. Signal Processing, 1993. timal tree approximation using wavelets. In A. J. Aldroubi and M. Unser, editors, Wavelet Applications in Signal tev VII, pages 196–207. SPIE, 1999. . Introduction to Data Compression, Computer Science Department, Carnegie Mellon University. "LZW Data Compression, "The Computer Science Department, Carnegie Mellon University. "LZW Data Compression using adaptive Fourier coefficients estimation", Med. Eng. Phys., Vol. 16. Prajakta K. Sarolkar, Meghna Nagori Planned Events Across Social Media Sites Using Association Rule Mining Based on Autocorrr ntributed Web data contains rich and diverse information about a variety of events in the physical ws, festivals, conferences and more. This information ranges from known event features (e.g., title, sted on event aggregation platforms (e.g. Event Brite, Face book events) to discussions and o events shared on different social media sites (e.g., Twitter, YouTUbe, Flickr). In this paper, we age of automatically identifying user-contributed content for events that are planned and, therefore, across di	20-25
5.	 Keywords: Decin Packet. References: Goudarzi, M.M, Engineering, Con Benzid, R., Marir signals," Internati Benzid, R., Marir "Electronics Letted Bell, T.C., Cleary, J Donoho, D.L., Vet H.C.Liu and G.L. and System, 1995. J. M. Shapiro. En D. Sinha and A. T R. Baraniuk. Op Processing, volun Blelloch, E., 2002 Phillips, Dwayne, Al-Nashash, H. A Authors: Paper Title: Abstract: User-co world, such as show time, location) por reactions related to propose the challer known in advance, which are often no associated with an	nated Discrete Wavelet, Fixed encoding, Huffman encoding, Wavelet Decomposition, Wavelet and Moradi, H. M., 2005, "Electrocardiogramsignal compression Using multiwavelet transform," Transactions on uputing and Technology. F., and Bouguechal, N. E., 2006, "Qualitycontrolled compression method using wavelet transform for electrocardiogram onal Journal of Biomedical Science. F., Benyouecf, M., and Arar, D., 2003, "Fixed percentage of wavelet coefficients to be zeroed for ECG compression rs Vol 39 No 11. G., W., Written, I.H., Text Compression, (Prentice Hall,Englewood Cliffs(1990)). etil, M., Devore, R.A., Daubechies, I., "Data Compression and Harmonic Analysis", IEEE Trans. Inf. Theory. Zick, "Automatic determination of scene changesnin MPEG compressed video," in Proc.ISCAS –IEEE Int .Symp.Circuits bedded image coding using zerotrees of wavelet coefficients .IEEE Trans. Signal Processing, 1993. timal tree approximation using wavelets. In A. J. Aldroubi and M. Unser, editors, Wavelet Applications in Signal te VII, pages 196–207. SPIE, 1999. . Introduction to Data Compression, Computer Science Department, Carnegie Mellon University. "LZW Data Compression, Computer Applications Journal, Circuit Cellar Net, vol. 27, June/July 1992. . M., 1994, "ECG data compression using adaptive Fourier coefficients estimation", Med. Eng. Phys., Vol. 16. Prajakta K. Sarolkar, Meghna Nagori Planned Events Across Social Media Sites Using Association Rule Mining Based on Autocorre ntributed Web data contains rich and diverse information about a variety of events in the physical ws, festivals, conferences and more. This information ranges from known event features (e.g., title, sted on event aggregation platforms (e.g. Event Brite, Face book events) to discussions and o events shared on different social media sites (e.g., Twitter, YouTube, Flickr). In this paper, we ge of automatically identifying user-contributed content for events that are planned and, therefore, across different social media sites. We mine event aggregation platf	20-25

	Keywords: Propose the challenge of automatically identifying user-contributed.			
	P oforoncos.			
	1. E. Agichtein, C.	Castillo, D. Donato, A. Gionis, andG. Mishne. Finding high-quality content in social media. InProceedings of the First		
	ACM Internation	nal Conference on Web Search and Data Mining (WSDM '08), 2008. Topic Detection and Tracking: Event-based Information Organization, Kluwer Academic Publisher, 2002		
	3. H. Becker, F. Ch	hen, D. Iter, M. Naaman, and L. Gravano.Automatic identi_cation and presentation of Twitter contentfor planned events. In		
6.	Proceedings of t 4. H. Becker, M. N	he Fifth InternationalAAAI Conference on Weblogs and Social Media (ICWSM'11), 2011. Naaman, and L. Gravano, Learning similaritymetrics for event identi cation in social media. In Proceedingsof the Third	26-28	
	ACM Internation	nal Conference on Web Search and Data Mining (WSDM '10), 2010.	20-20	
	5. H. Becker, M. I International AA	Naaman, and L. Gravano. Beyond trendingtopics: Real-world event identi_cation on Twitter. InProceedings of the Fifth AI Conference onWeblogs and Social Media (ICWSM '11), 2011.		
	6. H. Becker, M.	Naaman, and L. Gravano. Selecting qualityTwitter content for events. In Proceedings of the FifthInternational AAAI		
	7. E. Benson, A.	Haghighi, and R. Barzilay. Event discovery insocial media feeds. In Proceedings of the 49th Annual Meetingof the		
	Association for 0 8 R. Crane and D	Computational Linguistics: HumanLanguage Technologies (ACL-HLT '11), 2011.		
	National Acader	ny of Sciences,105(41):15649{15653, 2008.		
	9. W. B. Croft, D. I 10. W. Dakka and	Metzler, and T. Strohman. Search Engines: Information Retrieval in Practice. Addison-Wesley Publishing Company, 2009. P. G. Ipeirotis. Automatic extraction of useful facet hierarchies from text databases. In Proceedings of the IEEE 24th		
	International Conference on Data Engineering (ICDE '08), 2008.			
	 N. Diakopoulos, M. Naaman, and F. Kivran-Swaine.Diamonds in the rough: Social media visual analytics forjournalistic inquiry. In Proceedings of the IEEE Symposiumon Visual Analytics Science and Technology (VAST '10).2010. 			
	12. Events, 2002. In	Stanford Encyclopedia of Philosophy. Retrieved June 2nd, 2010 from http://plato.stanford.edu/entries/events/.		
	clustering. In Pr	occeedings of the 23rdACM International Conference on Research and Development in Information Retrieval (SIGIR '00),		
	2000.			
	Authors:	Imlitoshi Jamir, Leo Satminlien Singsit		
	Paper Title:	Improved IPTV Services in IPv4 and IPv6 Environments Based on Wireless Networks		
	Abstract: Today'	s modern Internet Technology is based on Internet Protocol for all means of communication		
	between two end s	systems. The current internet usage is predominantly dominated by IPv4 version of IP but due to number of internet usars in the past years IPv4 addresses will seen be deploted. Ipv4 provided a		
	limited address sn	pace so there is a need to move to IPv6 which is an enhancement over its older version and		
	overcomes most o	f the drawback seen in the earlier version. However migrating to IPv6 from IPv4 would be a		
	herculean task sind	ce the present infrastructure is built to suit the IPv4 environment. Here in this paper the primary		
	objective is to imp	blement IPTV by considering the Video on Demand services. The network type is converted to		
	WaveLan for effect	tive bandwidth utilization and efficient communication. The present work here involves 2 types of IPv4 based work and second is TCP IPv6 Based work, where the TCP IPv6 Based work is again		
	comprised of the c	butcome without optimization and with optimization. The presented work is expected to improve		
	the network QOS	and the network reliability in case of overloading and underloading conditions. We performed the		
_	various simulation	s on Network Simulator 2.35 and analyzed the three types of traffic. Video on Demand services		
7.	generally involves	transmitting huge amount of data over such networks requiring a considerable data rate.	a a a a	
	Keywords: AOD	/, DVB-IPTV, IPTV, VOD.	29-31	
	Dé			
	1. Yang Xiao, xiaoji	iang DU, Jingyuan Zhang, Fei Hu, Sghaier Guizani, "IPTV the Killer Application for the next generation Internet", IEEE		
	2007.			
	 Benjamin Alfonsi C. Perkins," Ad h 	oc On-Demand Distance Vector (AODV) Routing", Request for Comments: 3561, 2003.		
	4. Digital Video Bro	padcasting (DVB), Transport of MPEG-2 TS Based DVB Services over IP Based Networks (DVB-IPTV Phase 1.4) DVB		
	5. Eugen Mikóczy	(2010)," Personalization of Internet Protocol Television (IPTV) Services in Next-Generation Networks(NGN)		
	Architectures", IE	EE 2010 a "How much can we survive on an IPv6 network?" AINTEC 2011		
	 Jordi Mongay Ba 	talla and Piotr Krawiec, "On Implementing IPTV Platform with IPv4 and IPv6 Devices", Journal of Telecommunication		
	and Information T 8. Kuo-Chang Chen	Technology 2011. "The Open Source IPTV Service Development Environment- IPTV Service Execution Environment", ICUIMC 2010		
	9. Shuai Qu, Jonas L	indqvist, and Claus Popp Larsen, "Experimental IPTV and IPv6 Extended Provisioning in a Virtual Testbed", ICN 2011.		
	Authors:	Sonia Hammami		
	Paper Title:	Nonlinear Observer Design for Chaotic Systems Synchronization with Known or Unknown Parameters		
	Abstract: This pa	per deals with the nonlinear observer-based synchronization problem for coupled chaotic systems.		
	At the outset, com	plete synchronization conditions of coupled chaotic systems for known master and slave systems		
	parameters, is prov	vided. The active control law developed is based on the use of aggregation techniques for error		
	dynamics stability	study and the arrow form matrix for systems description. Then, by the design of an adequate		
	point, the propose	d observer-based synchronization between two nearly identical chaotic systems with unknown		
	parameters is carri	ed out. Numerical simulations are presented to assess the performance and the efficiency of the		
	proposed contribut	ions.		
	Kouwonda.	protion toohniquos Arrow form motrix Chaotic systems Synchronization Nonlinear charges		
	Neyworus: Aggree	gation techniques, Arrow form matrix, Unaoue systems, Synchronization, Nonlinear observer, ers.		
	Unknown parameters.			

References:

8.

- 1. L. M. Pecora and T. L. Carroll, "Synchronization in chaotic systems", Phys Rev Lett, vol. 64, 1990, pp. 821-824.
- 2. M. Ogorzalek, "Taming chaos-I: Synchronization", IEEE Trans Circ Syst-I, vol. 40, 1993, pp. 693-699.
- 3. S. Hammani, "Sur la stabilisation de systèmes dynamiques continus non linéaires exploitant les matrices de formes en flèche. Application à la synchronisation de systèmes chaotiques", Ph.D. thesis, National Engineering School of Tunis, Tunis, 2009.
- 4. S. Hammami, K. Ben Saad and M. Benrejeb, "On the synchronization of identical and non-identical 4-D chaotic systems using arrow form matrix", Chaos, Solitons & Fractals, vol. 42, 2009, pp. 101-112.
- 5. C. W. Wu and L. O. Chua, "A simple way to synchronize chaotic systems with applications to secure communication systems", Int J Bifurcation Chaos, vol. 3, 1993, pp. 1619-1627.
- 6. K. M. Cuomo, A. V. Oppenheim and S. H. Strogatz, "Synchronization of lorenzed-based chaotic circuits with applications to communications", IEEE Trans Circ Syst-II, vol. 40, 1993, pp. 626-633.

32-38

39-45

- 7. Ö. Morgül and M. Feki, "A chaotic masking scheme by using synchronized chaotic systems", Phys Lett A, vol. 251, 1999, pp. 169-176.
- 8. L. Chua, M. Itoh, L. Kocarev and K. Eckert, "Chaos synchronization in chua's circuit", J Circuit Syst Comput, vol. 3, 1993, pp. 93-108.
- 9. M. Hasler, "Synchronization principles and applications", in IEEE international symposium on circuits and systems, 1994, vol. 3, pp. 314-327, New York.
- 10. S. Chen and J. Lü, "Synchronization of an uncertain unified chaotic system via adaptive control", Chaos Solitons & Fractals, vol. 14, 2002, pp. 643-647.
- 11. K. Sakthidasan and B. V. Santhosh Krishna, "A new chaotic algorithm for image encryption and decryption of digital color images", Int J of Information and Education Technology, vol. 1, 2011, pp. 137-141.
- 12. H. Xiping and Q. Zhang, "Image encryption based on chaotic modulation of wavelet coefficients", in Congress on IEEE Image and Signal Processing, 2008, vol. 1, pp. 622-626, Sanya, Hainan.
- 13. L. Kocarev and U. Parlitz, "Generalized synchronization, predictability, and equivalence of unidirectionally coupled dynamical systems", Phys Rev Lett, vol. 76, 1996, pp. 1816-1819.
- 14. S. S. Yang and K. Duan, "Generalized synchronization in chaotic systems", Chaos, Solitons & Fractals, vol. 10, 1998, pp. 1703-1707.
- G. R. Michael, S. P. Arkady and K. Jürgen, "Phase synchronization of chaotic oscillators", Phys Rev Lett, vol. 76, 1996, pp. 1804-1807.
 I. S. Taherion and Y. C. Lai, "Observability of lag synchronization of coupled chaotic oscillators", Phys Rev E, vol. 59, 1999, pp. 6247-
- I. S. Talefon and T. C. Lai, Observability of lag synchronization of coupled chaotic oscillators, Phys Rev E, vol. 59, 1999, pp. 6247-6250.
 K. Barnerich M. Eaki and P. Barne. "Eachback control design for Bösslar and Chan shoetia systems anti-symphronization."
- S. Hammami, M. Benrejeb, M. Feki and P. Borne, "Feedback control design for Rössler and Chen chaotic systems anti-synchronization", Phys Lett A, vol. 374, 2010, pp. 2835-2840.
- S. Hammami and M. Benrejeb, "Coexistence of synchronization and anti-synchronization for chaotic systems via feedback control", Chaotic systems, Croatia: Editions INTECH, 2011, pp. 203-224.
- 19. Y. Zhang and J. Sun, "Chaotic synchronization and anti-synchronization based on suitable separation", Phys Lett A, vol. 330, 2004, pp. 442-447.
- G. H. Li, "Synchronization and anti-synchronization of Colpitts oscillators using active control", Chaos, Solitons & Fractals, vol. 26, 2005, pp. 87-93.
- 21. Ö. Morgül and E. Solak, "Observer-based synchronization of chaotic signals", Phys Rev E, vol. 54, 1996, pp. 4803-4811.
- 22. Ö. Morgül and E. Solak, "On the synchronization of chaotic systems by using state observers", Int J Bifurcation Chaos, vol. 7, 1997, pp. 1307-1322.
- 23. H. Nijmeijer and I. Mareels, "An observer looks at synchronization", IEEE Trans Circ Syst-I, vol. 44, 1997, pp. 882-890.
- 24. Q. H. Alsafasfeh and A. I. Alshbatat, "Image encryption based on synchronized communication chaotic circuit", J of Applied Sciences Research, vol. 7, 2011, pp. 392-399.
- 25. S. Bu and B. H. Wang, "Improving the security of chaotic encryption by using a simple modulating method", Chaos, Solitons & Fractals, vol. 19, 2004, pp. 919-924.
- 26. P. Borne and M. Benrejeb, "On the representation and the stability study of large scale systems", International Journal of Computers Communications and Control, vol. 3, 2008, pp. 55-66.
- 27. J. C. Gentina, "Contribution à l'analyse et à la synthèse des systèmes continus non linéaires de grande dimension", D.Sc. thesis, University of Sciences and Techniques of Lille, Lille, France, 1976.
- 28. S. Hammami, M. Benrejeb and P. Borne, "New nonlinear output feedback controller for stabilizing the Colpitts oscillator", Int J on Sciences and Techniques of Automatic control and computer engineering, vol. 3, 2009, pp. 996-1011.
- 29. S. Hammami, M. Benrejeb and P. Borne, "On nonlinear continuous systems stabilization using arrow form matrices", Int Review of Automatic Control, vol. 3, 2010, pp. 106-114.
- 30. S. Hammami and M. Benrejeb, "New stabilizing controller nonlinear system design using the generalized thin arrow form matrix. Application to the chaos synchronization", in the 12th Int Federation of Automatic Control Large Scale Systems Symposium: Theory and Applications, 2010, Lille.
- H. C. Juhn, K. C. Hsien and K. L. Yu, "Synchronization and anti-synchronization coexist in Chen–Lee chaotic systems", Chaos, Solitons & Fractals, vol. 39, 2009, pp. 707-716.

Authors:	Y. Y. Nandurkar, S. S. Akant, S. L. Bankar, R. G. Bodkhe
Paper Title:	Alternative Fuels for IC Engines
Abstract: The main purpose of fuel is to store energy, which should be in a stable form and can be easily transported	

Abstract: The main purpose of fuel is to store energy, which should be in a stable form and can be easily transported to the place of production. Almost all fuels are chemical fuels. We as a user use this fuel to perform mechanical work, such as powering an engine. The historical and the present- day civilization are closely interwoven with energy and in future, our existence will be more dependent upon energy. The conventional sources of energy, the single most important pre-requisite for power generation, are depleting fast. The world is heading towards a global energy crisis mostly due to running out of these energy sources; decreasing the dependency on fossil fuels is recommended. Yet, the sources of energy are infinite. The greatest task today is to exploit the non-conventional energy resources for power generation. Alternative energy sources provide many benefits. Renewable energy development can create

9. power generation. Alternative energy sources provide many benefits. Renewable energy development can create quality jobs and promote economic development, especially in rural areas. If used to diversify utility resource portfolios, alternative energy technologies can provide a hedge against rising fuel prices and can be valuable risk management tools.

Keywords: Decreasing the dependency on fossil fuels is recommended.

References:

- 1. "Batteries, Supercapacitors, and Fuel Cells: Scope". Science Reference Services. 20 August 2007.
- 2. http://www.loc.gov/rr/scitech/tracer-bullets/batteriestb.html#scope. Retrieved 11 February 2009.
- 3. "Fuel Cell Basics: Benefits". Fuel Cells 2000.
- 4. http://www.fuelcells.org/basics/benefits.html.

Authors:	M. N. Balakrishna, M. C. Nataraja
----------	-----------------------------------

Paper Title: Proportioning of Fly Asn Concrete Mixes A Comprehensive Approach	'aper Title:	xes A Comprehensive Approach
---	--------------	------------------------------

Abstract: The Concrete as a material synonymous with strength and longevity has emerged as the dominant construction material for the infrastructure needs of the 21st century. In addition to being durable, concrete is easily prepared and fabricated from readily available constituents and is therefore widely used in all types of structural systems. However, the environmental drawbacks of cement production have come under increased scrutiny as expanding industrialization and urbanization fuel the accelerated growth of infrastructure worldwide. As a consequence of that, Fly ash is one such supplementary cementing material which in turn more concern about environmental and cost-effective objectives. In this research investigation, the influencing factors of Fly ash and Cement to arrive at appropriate combinations so to satisfy the requirement of placement, development of strength with age has been examined. Also in this investigation that, the applicability of Generalized Abrams law [1] developed for single cementing materials has been examined to two components like Cement and Fly ash. In addition to that, with the determination of workability and strength of trail mix at different ages, how adjustments can be made in water/cementitious ratio in order to arrive at matching micro-structure in hardened states, so as to result in strength development of Fly ash cement concrete mixes, in turn to obtain identical strength levels are to be investigated. Analysis of experimental data reveals that even with high grade of cement, Fly ash admixture could not be effective despite the fineness requirement is satisfied provided if carbon content is high. On the contrary if Fly ash satisfies fineness consideration without unburnt carbon, the development of strength could not approach as that of normal concrete at later ages provided when the grade of cement is not high enough such as 53 grade of cement. Thus finally in order to achieve judicious combinations of Fly ash and Cement in concrete mixes, its very essential to satisfy the requirement of cementitious materials like grade of cement, fineness of Fly ash with very low unburnt carbon content.

Keywords: Fly ash, Mix proportioning; Cementitious materials; Fineness; Grade of concrete; Age of Concrete; Compressive strength.

10. References:

the child.

- 1. Abrams, Duff., "Design of Concrete Mixtures", Bulletin No.1, Structural materials Research Laboratory Lewis Institute, Chicago, 1918, 20 pp. 46-51
- 2. Nagaraj,T.S., Shashiprakash, S.G., and Kameshwara Rao, B., "Generalized Abrams Law", Paper for Rilem colloquium, Properties of Fresh Concrete, Hanover, Federal Republic of Germany, Oct 1990, pp.242-252.
- 3. Fulton AA and Marshall WT. "The use of fly ash and similar materials in concrete", Proc. Inst. Civil Eng. Part 1, 5:714 730 (1956).
- 4. Anon, "An investigation of the pozzolanic nature of coal ashes", Engineering News, V.71, No.24, 1914, pp.1334 1335.
- 5. Davis RE, Carlston RW, Kelly JW, and Davis HE., "Properties of cements and concretes containing fly ash", ACI Journal, 33:577 612 (1937).
- 6. Dhir RK, Munday JGL, and Ong LT., "Strength variability of OPC/ fly ash concrete", Concrete, 15(6), (a) 33 37, (1981).
- Dhir RK, Apte AG and Munday JGL., "Effect of in-source variability of pulverized fuel ash upon the strength of OPC/fly ash concrete", Magazine of Concrete Research, 33(117), (b):119 - 207, (1981).
- 8. Dhir, R K, Jones, M R. and Munday, J G L., "A practical approach to studying carbonation of concrete", Concrete V.19, No. 1, October 1985, pp.32-34.
- 9. Dhir, R K, Jones, M R, Munday, J G L. and Hubbard, F H., "Physical characterisation of UK pulverized-fuel ashes for use in concrete", Magazine of Concrete Research, V.37, No. 131, June 1985, pp.75-87.
- Dhir, R.K., Jones, M.R. and McCarthy, M.J., "PFA Concrete: chloride ingress and corrosion in carbonated cover", roceedings of the Institution of CivilEngineers, Structures and Buildings, V. 99, No 2, 1993, pp.167-172.
- 11. Dhir, R.K., Jones, M.R. and McCarthy, M.J. "PFA Concrete: carbonation-induced reinforcement corrosion rates", Proceedings of the Institution of Civil Engineers, Structures and Buildings, V. 94, No 3, 1992, pp.335 342.
- 12. McCarthy, M.J. and Dhir, R.K., "Development of high fly ash volume cements for use in concrete construction", Fuel Journal, V.84, No 11, 2005, pp.1423-1432.
- 13. McCarthy, M.J., Tittle, P.A.J., Dhir, R.K. and Kii, H.K., "Mix proportioning and engineering properties of conditioned PFA concrete", Cement and Concrete Research, V.31, 2001, pp.321 -326.
- 14. McCarthy., M.J., Tittle, P.A.J and Dhir, R.K., "Influences of conditioned PFA as a cement component in concrete", Magazine of Concrete Research, V.52, No.5, 2000, pp.329-343.
- 15. Swamy, R.N., "Utilization of Fly ash: A Challenge to Concrete Technology", Proceedings, Indian Concrete Journal, May-June1985, pp.119-140 and 147-167.
- 16. ACI 116R (1985) Cement and Concrete Terminology, ACI Journal, Detroit.

17. Mukherjee, P.K., Loughborough, M.T., and Malhotra, "Development of High-Strength Concrete Incorporating Large Percentage of Fly Ash and Superplasticizers", ASTM Cement, Concrete and Aggregates, V.4, No.2, Winter 1993, pp.81-86.

 W.S, Lanley., G.G, Carrette., and V.M, Malhotra., "Structural Concretes Incorporating High Volumes Of ASTM Class F Flyash", ACI Materials Journal, V.86, No.5, 1989, pp.507-514.
 Authors: Gauray Aggarwal. Pooia Schrawat. Neha Charaya

Authors:	Gaurav Aggarwal, Pooja Sehrawat, Neha Charaya	
Paper Title: Improving the Joint Attention and Intelligibility in Speech of Autistic Children by an Assisti		
Abstract: This paper presents an assistive robot for the children with autism to improve their joint attention and		
intelligibility in th	e speech over some traditional approaches for rehabilitation of children with autism spectrum	
disorder (ASD) w	here the robot can detect the affective cues of the children implicitly and response to them	
appropriately. Aut	ism spectrum disorder (ASD) is a developmental brain disorder that is characterized by abnormal	
social behaviour,	reduced interest in communicating with others, language disorders, repetitive and obsessive	
behaviours and rite	als and narrowly focused rigid interests. A reinforcement learning based adaptation mechanism is	
employed to allow	the robot to adjust its behaviors autonomously as a function of the predicted children's affective	
state. Although th	ere is no definite treatment or medicine for autism so doctors and therapists can help kids over	
some kind of diffi	culties by different psychological and physical therapies. In the above scenario robot detect the	
child attention at e	ach session. We detect the child attention by reading the child eye gaze pattern and improve the	
intelligibility by us	sing some training data. Here robot is able to change the scenarios according to the performance of	

Keywords: Assistive robot; Autism.

References:

- Center for Disease Control and Prevention, CDC. Autism Information Center, DD, NCBDDD, CDC, Atlanta, April 25, 2007.
- 2 Karla Conn, Changchun Liu, Nilanjan Sarkar, Wendy Stone, and Zachary Warren "Affect-sensitive Assistive Intervention Technologies for Children with Autism: an Individual-specific Approach" Proceedings of the 17th IEEE International Symposium on Robot and Human
- 11.

Interactive Communication, Technische Universität München, Munich, Germany, August 1-3, 2008

- Karla Conn, Changchun Liu, Nilanjan Sarkar,, Wendy Stone, and Zachary Warren "Affect-sensitive Assistive Intervention Technologies 3. for Children with Autism: an Individual-specific Approach roceedings of the 17th IEEE International Symposium on Robot and Human Interactive Communication, Technische Universität München, Munich, Germany, August 1-3,
- D. Strickland, L. Marcus, K. Hogan, G. Mesibov, and D. McAllister, "Using virtual reality as a learning aid for autistic children," in 4 Proceedings of the Autism France Third International Conference on Computers and Autism, 1995, pp. 119–132.
- D. Strickland, "A virtual reality application with autistic children," PRESENCE: Teleoperators and Virtual Environment, vol. 5, no. 3, pp. 5 319-329, 1996.
- 6. P. Mitchell, S. Parsons, and A. Leonard, "Using virtual environments for teaching social understanding to 6 adolescents with autistic spectrum disorder" J Autism Dev Disord, vol. 37, pp. 589-600, 2007.
- K. Dautenhahn and I. Werry, "Towards interactive robots in autism therapy: background, motivation and challenges," Pragmatics & 7 Cognition, vol. 12, pp. 1-35, 2004.
- APA. Diagnostic and statistical manual of mental disorders: DSM-IVTR, 4th ed., Washington, DC: American Psychiatric Association. On, 8. 2000. Spectrum disorders," J Autism Dev Disord, vol.37, pp. 589-600, 2007
- 9. Md. Mustafizur Rahman, S. M. Ferdous, Syed Ishtiaque Ahmed "Increasing Intelligibility in the Speech of the Autistic Children by an Interactive Computer Game" Multimedia (ISM), 2010 IEEE International Symposium on Date of Conference: 13-15 Dec. 2010
- L. Kanner, "Autistic Disturbances of Affective Contact," in Kanner, L. ed. Nervous Child 2, V.H. Winston, 1943, pp.217-250. 10.
- K. Dautenhahn and A. Billard, "Games children with autism can play with robota, a humanoid robotics doll," in In Proceedings of the 1st 11. Cambridge Workshop on Universal Access and Assistive Technology, 2002, p. CWUAAT
- B. Robins, K. Dautenhahn, R. Boekhorst, and A. Billard, "Robotic assistants in therapy and education of children with autism: Can a small humanoid robot help encourage social interaction skills," Special issue of Universal Access in the Information Society, vol. 4, no. 2, pp. 12. 105-120, 2005.
- S. R. Leekama, E. Hunnisett, and C. Moore, "Targets and cues: Gazefollowing in children with autism," Journal of Child Psychology and 13. Psychiatry, vol. 39, pp. 951-962, 1998.
- I. Werry, K. Dautenhahn, B. Ogden, and W. Harwin, "Can social interaction skills be taught by a social agent? The role of a robotic 14 mediator in autism therapy," in CT '01: Proceedings of the 4th International Conference on Cognitive Technology. London, UK: Springer-Verlag, 2001, pp. 57-74.
- I. I. Lovaas, "The Autistic Child". John Wiley & Sons, Inc, New York, 1977. 15.
- C. B. Baskett, "The effect of live interactive video on the communicative behavior in children with autism", University of North Carolina at 16. Chapel Hill, Chapel Hill, 1996
- 17. N. Parés, A. Carreras, et al. "Promotion of creative activity in children with severe autism through visuals in an interactive multisensory environment" The 2005 conference on Interaction design and children, ACM Press, Boulder, Colorado, 2005.
- 18. P. Ravindra S. De Silva, Katsunori Tadano, Azusa Saito, Stephen G. Lambacher, and Mastake Higashithe "the development of an assistive robot for improving the joint attention of autistic children" International Conference on Intelligent RObots and Systems - IROS - IROS , pp. 3561-3567, 2009
- B. Robins1, P. Dickerson, P. Stribling, and K. Dautenhahn, "Robot mediated joint attention in children with autism: A case study in robot 19 human interaction," Interaction Studies, vol. 5, no. 2, pp. 161-198, Nov 2004
- P. Ravindra S. De Silva, Katsunori Tadano, Azusa Saito, Stephen G. Lambacher, and Mastake Higashithe "the development of an assistive 20 robot for improving the joint attention of autistic children" International Conference on Intelligent RObots and Systems - IROS - IROS , pp. 3561-3567, 2009

Prashanth N. G, Manojkumar S. B, Balaji B. S, Naveena Pai G, Havyas V. B Authors: Design and Synthesis of Reversible Fault Tolerant Carry Skip Adder/Subtractor **Paper Title:**

Abstract: Reversible logic will be having more demand in future computation technology because of its zero power dissipation under ideal conditions. This paper proposes the fault tolerant carry skip adder/subtractor by using parity preserving reversible logic gates. According to the control logic input the proposed design can works as a carry skip adder or carry skip subtractor.

Keywords: Reversible Logic Gates, Parity Preserving reversible Logic Gates, Full Adder/Subtractor, Parallel Adder/Subtractor, Carry Skip Adder/Subtractor.

References:

12.

- R. Landauer, "Irreversibility and Heat Generation in the Computational Process", IBM Journal of Research and Development, 5, pp. 183-1. 191 1961
- 2. C.H. Bennett, "Logical Reversibility of Computation", IBM J. Research and Development, pp. 525-532, November 1973.
- B. Parhami, "Fault tolerant reversible circuits", in Proceedings of 40th Asimolar Conf. Signals, Systems, and Computers, Pacific Grove, CA, pp. 1726-1729, October 2006. 3.
- 4
- 5.
- E. Fredkin and T. Toffoli, "Conservative logic", Intl. Journal of Theoretical Physics, pp. 219-253, 1982. B.
 R. Feynman, "Quantum mechanical computers", Optical News, vol. 11, 1985, pp. 11-20.
 M. S. Islam, M. M. Rahman, Z. Begum, M. Z. Hafiz and A. A. Mahmud, "Synthesis of fault tolerant reversible logic circuits", In Proc. 6. IEEE International Conference on Testing and Diagnosis, Chengdu, China, 28-29 April, 2009.
- 7. Islam S. and M. Mahbubur Rahman, 2009b. "Efficient Approaches for Designing Fault Tolerant Reversible Carry Look-Ahead and Carry-Skip Adders", MASAUM Journal of Basic and Applied Sciences, 1(3): 354-360.
- Majid Haghparast and Keivan Navi, "A Novel Fault Tolerant Reversible Gate For Nanotechnology Based Systems", American Journal of 8. Applied Sciences 5 (5): 519-523, 2008 ISSN 1546-9239
- Prashanth N G, Savitha A P, M.B.Anandaraju, Nuthan A C, "Design and Synthesis of Fault Tolerant Full Adder/Subtractor using 9 Reversible Logic Gates". International Journal of Engineering Research and Applications (IJERA) ISSN: 2248-9622 Vol. 3, Issue 4, Jul-Aug 2013 pp137-142
- 10. Himanshu Thapliyal, M.B Srinivas, "A New Reversible TSG Gate and Its Application for Designing Efficient Adder Circuits" arXiv preprint cs/0603091, 2006
- Parminder Kaur & Balwinder singh Dhaliwal "Design of Fault Tolerant Full Adder/Subtractor Using Reversible Gates" 2012 International 11. Conference on Computer Communication and Informatics (ICCCI -2012), Jan. 10-12, 2012, Coimbatore, INDIA

Authors:	Veena Abraham, Soumen Basak, Sabi S

52-54

55-58

	Paper Title:	Design of AXI4 Protocol Checker for SoC Integration	
Abstract: System-on-a-Chip (SoC) design has become more and more complex because Intellectual Pro core with different functions are integrated within a single chip. Each IPs have completed design and verifit the integration of all IPs may not work together. The bus-based architecture has become the major i methodology for implementing a SoC. The main issue is to ensure that the IP works correctly after integrate corresponding bus architecture. Advanced extensible interface 4 (AXI4) is an on chip bus architecture intro ARM to interact with its peripherals. A synthesizable AXI4 protocol checker which contains a set of rules on-chip communication properties accuracy is proposed to ensure proper SoC integration. A prototype Master and AXI Slave is also designed to generate the AXI4 signals. The protocol checker will continuousl the signals from AXI4 Master and AXI4 Slave to check whether any rule is broken or not. The propo protocol checker will check both the Write Channel and Read Channel transactions. As the AXI4 or synthesizable it can be used in FPGA (Field Programmable Gate Array) and Emulation where functional or difficult to detect and pin point. The AXI4 Master, AXI Slave and AXI4 protocol checker have been mode Verilog and implemented on Digilent Basys2 Spartan 3E FPGA board.			
	Keywords: Syster	n on a Chip, AXI4 protocol, Intellectual Property cor, Write Channel, Read channel.	
13.	References: 1. S. Pasricha, N. I 2. IBM, Core conn 3. Wishbone syster 4. ARM, "AMBA 5. A. Shrivastava, in Proc. Int. Con 6. ARM, "AMBA 7. Hyun-min Kyun Unit (PAU) for	Dutt, On-Chip Communication Architectures: System on Chip Interconnect, Morgan Kaufmann, 2008. ect bus architecture. IBM Microelectronics. Available at http://www.ibm.com m-on-chip (soc) interconnection architecture for portable IP cores. Available at http://www.opencores.org Specification (Rev 2.0)". [Online] Available: http://www.arm.com G.S Tomarand A.K. Singh, "Performance Comparison of AMBA Bus-Based System-On-Chip Communication Protocol", f. Communication Systems and Network Technologies (CSNT), June 2011, pp. 449- 44. AXI protocol specifications (Version 2), March 2010", [Online] Available: http://www.arm.com. g, Gi-ho Park , Jong Wook Kwak , Tae-jin Kim and Sung-Bae Park, "Design and implementation of Performance Analysis AXI-based multi-core System on Chip (SOC)" , Elsevier Trans. Microprocessors and Microsystems, vol. 34, pp. 102-116,	59-65
	 March 2010. M. Daneshtalab, IEEE Trans. Coi Jun Zheng, Kan ASIC, Oct. 2007 Na Ra Yang, G System-on-a-Ch Mobile Computi Bruce Mathewst DAC), June 201 Kanna, Shimizu Conf. on Forma Marcio T. Olive monitors", in Pr M. S. Jahanpour IEEE Int. Conf. YT. Lin, CC. IEEE Internation Chien-Hung Ch Conf. SoC Desi Digilent Basys2 AdeptTM Applic: 	 M. Ebrahimi, P. Liljeberg, J. Plosila and H. Tenhunen, "Memory-Efficient On-Chip Network with Adaptive Interfaces", mputer-Aided Design of Integrated Circuits and Systems, vol. 31, issue 1, pp. 146 -159, Jan. 2012. g Sun, Xuezeng Pan, and Lingdi Ping "Design of a Dynamic Memory Access Scheduler", in Proc. IEEE 7 th Int. Conf. 7, pp. 20-23. ilsang Yoon, Jeonghwan Lee, Intae Hwang, Cheol Hong Kim, Sung Woo Chung and Jong Myon Kim, "Improving the ip Performance for Mobile Systems by Using Efficient Bus Interface", in Proc. IEEE Int. Conf. Communications and ing, Vol 4, March 2009, pp. 606-608. n "The Evolution of SOC Interconnect and How NOC Fits Within It", in Proc. IEEE 47 th Int. Conf . Design Automation(0, pp. 312-313. , David L. Dill and Alan J. Hu. "A monitor-based formal specification of PCI", in Proc. Springer-Verlag London 3rd Int. Il Methods in Computer-Aided Design, Nov. 2000, pp. 335-353. sira, Alan J. Hu, "High level specification and design: High-Level specification and automatic generation of IP interface oc. 39th Conf. on Design automation, June 2002, pp. 129-134. r, E. Cerny, "Compositional verification of an ATM switch module using interface recognizer/suppliers (IRS)", in Proc. International High-Level Design, Validation, and Test Workshop, 2000, pp. 71-76. Wang, and IJ. Huang, "AMBA AHB Bus Protocol Checker with Efficient Debugging Mechanism," In Proceedings of the al Symposium on Circuits and Systems(ISCAS'08), May 2008, pp. 929-931. en, Jiun-Cheng Ju, and Ing-Jer Huang, "A Synthesizable AXI Protocol Checker for SoC Integration", in Proc. IEEE Int. gn (ISOCC), Nov. 2010, pp.103-106. Board Reference Manual. [Online] Available: http://www.digilentinc.com ation User's Manual. [Online] Available: http://www.digilentinc.com 	
	Authors:	Sarita Poonia, Mamtesh Nokhwal, Ajay Shankar	
	Paper Title:	A Secure Image Based Steganography and Cryptography with Watermarking	
14	Abstract: In this paper we uses the steganography and cryptography techniques with the watermarking so that to protect the particular information. Steganography is accomplished through hiding the information in the other information, thus by hiding the existence of the communicated information and steganography can be amplified by combining it with the cryptography and watermarking. And the cryptography is used for the security purpose. Cryptography uses two main styles or forms of encrypting data, symmetrical and asymmetrical. Watermarking technology is used for copyright protection of images, audios and videos. Watermarking process to signal modulation model. The basic idea of the proposed system is that it will allow an average user to securely transfer the text information by hiding them in a digital image file using the local characteristics within the image, which will provide a strong backbone for its security.		
14.	Keywords: Crypto	ography, PSNR, steganography, Water marking.	66-70
	References:1.N. Provos, "Defi2.N. Provos and P3.Steven W. Smith4.Katzenbeisser and 2000.5.L. Reyzen And S6.S.Lyu and H. Fa7.Venkatraman, s	ending Against Statistical Steganography," Proc 10th USENEX Security Symposium 2005. . Honeyman, "Hide and Seek: An introduction to Steganography," IEEE Security & Privacy Journal 2003. n, The Scientist and Engineer's Guide to Digital Signal Processing. Ind Petitcolas,"Information Hiding Techniques for Stenography and Digital watermaking" Artech House, Norwood, MA. S. Russell, "More efficient provably secure Steganography" 2007. rid, "Steganography using higher order image statistics, " IEEE Trans. Inf. Forens. Secur. 2006. , Abraham, A. & Paprzycki M." Significance of Steganography on Data Security ",Proceedings of the International reference Technology and Pathan	

- Conference on Information Technology : coding and computing , 2004. Fridrich, J., Goljan M., and Hogea , D ; New Methodology for Breaking stenographic Techniques for JPEGs. "Electronic Imaging 2003". http://aakash.ece.ucsb.edu./data hiding/stegdemo.aspx.Ucsb data hiding online demonstration. Released on Mar .09,2005. 8. 9.

	10. Mitsugu Iwanmo	oto and Hirosuke Yamamoto, "The Optimal n-out-of-n Visual Secret Sharing Scheme for GrayScale Images", IEICE Trans.		
	Fundamentals, v	ol.E85- A, No.10, October 2002, pp. 2238-2247. Nur Arad, Andrew Eitzbugh, Irwin Sobel, "Color Diffusion: Error Diffusion for Color Halftones", HP Laboratories, Israel		
	May 1999.			
	12. Z.Zhou, G.R.Ard	ce, and G.Di Crescenzo, "Halftone Visual Cryptography", IEEE Tans. On Image Processing, vol.15, No.8, August 2006, pp.		
	2441-2453. 13. M.Naor and A.S	Shamir, "Visual Cryptography", in Proceedings of Eurocrypt 1994, lecture notes in computer science, 1994, vol.950, pp. 1-		
	12. 14. Robert Ulichney San Jose CA 10	y, "The void-and-cluster method for dither array generation", IS&T/SPIE Symposium on Electronic Imaging and Science,		
	15. E.R.Verheul and	d H.C.A. Van Tilborg, "Constructions and properties of k out of n visual secret sharing scheme", Designs, Codes, and		
	Cryptography, v	ol.1, no.2, 1997, pp.179-196.		
	16. ANSI, ANSI X SERVICES IND	(9.44: KEY MANAGEMENT USING REVERSIBLE PUBLIC KEY CRYPTOGRAPHY FOR THE FINANCIAL DUSTRY WORKING DRAFT		
	17. M. BELLARE	AND P. ROGAWAY. OPTIMAL ASYMMETRIC ENCRYPTION-HOW TO ENCRYPT WITH RSA. IN ADVANCES		
	IN CRYPTOLO	GY-EUROCRYPT '94, PP. 92-111, SPRINGER-VERLAG, 1994.		
	18. M. BELLARE RABIN IN AD	AND P. ROGAWAY. THE EXACT SECURITY OF DIGITAL SIGNATURES-HOW TO SIGN WITH RSA AND VANCES IN CRYPTOLOGY-EUROCRYPT '96 PP 399-416 SPRINGER-VERLAG 1996		
	19. D. Bleichenbach	er. Chosen Ciphertext Attacks against Protocols Based on the RSA Encryption Standard PKCS #1. To appear in Advances		
	in Cryptology-C	rypto '98.		
	7, June 24, 1998			
	Authors:	Shanu Singh, Amit Kumar Pandey, Minu Rani		
	D TH			
	Paper Title:	Generalized Black Hole Attack and Comparative Solution for MANET		
	Abstract: MANE	T is widely used by defense and civilians for wide range of application. There are various		
	applications in wi	de range of communication. It's various routing technique makes it more flexible for various		
	operations. Mobile	e Ad-Hoc network which leads to an autonomous system, where station or nodes are connected		
	with each other the	rough air medium links. There is no boundaryconditions on the nodes to join or leave the network,		
	therefore the over	all operation is being freely. MANET topology is dynamic that can change rapidly because the		
	nodes move freely	and it can organize themselves randomly. Such a property of the nodes makes the mobile Ad-Hoc		
	networks unpredic	table from the point of view of topology and scalability. In this paper we fetch the various attacks		
	on MANET and co	ompare the technique to various solutions of MANET infrastructure which does not posses attacks.		
	This paper also con	ntains the protocol which leads to protect the MANET by attacks.		
	Keywords: MAN	ET, DSDV, DRI, Cross Checking, AODV.		
	References:			
	1. Sanjay Ramaswamy, Huirong Fu, Manohar Sreekantaradhya, John Dixon and Kendall Nygard, "Prevention of Cooperative Black Hole			
	Attack in Wireless Ad Hoc Networks" Department of Computer Science, IACC 258 North Dakota State University, Fargo, ND 58105.			
	 Hongmei Deng, Wei Li, and Dharma P. Agrawal, "Routing Security in Wireless Ad Hoc Network," IEEE Communications Magzine, vol. 			
	40, no. 10, Octol	ber 2002.		
	4. S. Marti et al,"I	Mitigating Routing Misbehavior in Mobile Ad Hoc Networks," 6th Int'l. Conference Mobile Comp. Net., pp. 255-265,		
	August 2000. 5. Vesa Kärpijoki, "Security in Ad hoc Networks," http://www.tcm.hut.fi/Opinnot/Tik- 110.501/2000/papers/karpijoki.pdf.			
	6. Srdjan Capkuny	, Levente Butty'an, and Jean-Pierre Hubaux, "Self-Organized Public-Key Management for Mobile Ad Hoc Networks,"		
	Technical Repor	t at EPFL, http://ic2.epfl.ch/publications/documents/IC_TECH_REPORT_200234.pdf.		
15.	8. Janne Lundberg.	"Routing Security in Ad Hoc Networks,"	71-75	
	http://citeseer.nj	j.nec.com/cache/papers/cs/19440/http:zSzzSzwww.tml.hut.fizSz~jluzSznetseczSz netsec-lundberg.pdf/routing-security-in-securit		
	ad.pdf 9 P.V.Jani "Secur	ity within Ad-Hoc Networks" Position Paner, PAMPAS Workshop, Sent 16/17 2002		
	10. M.Parsons and F	P.Ebinger, "Performance Evaluation of the Impact of Attacks on mobile Ad-Hoc networks"		
	11. D.B.Roy, R.Cha	aki and N.Chaki, "A New Cluster-Based Wormhole Intrusion Detection Algorithm for Mobile Ad-Hoc Neworks,"		
	International Jou 12 N Shanti L gane	irnal of Network Security and Its Application (IJNSA), Vol. 1, No.1, April, 2009. san and K Ramar "Study of Different Attacks On Multicast Mobile Ad-Hoc Network"		
	13. C.Wei, L.Xiang	, B.yuebin and G.Xiaopeng, "A New Solution for Resisting Gray Hole Attack in Mobile Ad-Hoc Networks," Second		
	International Co	nference on Communications and Networking in china, pp.366-370, Aug, 2007.		
	14. S.Marti, T.J.Giu	li, K.Lai, M.Baker, "Mitigating Routing Misbehavior in Mobile Ad-Hoc Networks". I Saadawi, T., "RTT-Based Optimal Waiting time for Best Route Selection in Ad-Hoc Routing Protocols." IEEE Military		
	Communication	s Conference, Vol. 2, pp. 1054-1059, Oct, 2003.		
	16. M.T.Refaei, V.S.	Srivastava, L.Dasilva, M.Eltoweissy, "A Reputation-Based Mechanism for Isolating Selfish nodes in Ad-Hoc Networks,"		
 Second Annual International Conference on Mobile and Ubiquitous Systems, Networking and Services, pp.3-11, July, V.Mahajan, M.Natue and A.Sethi, "Analysis of Wormhole Intrusion attacks in MANETs," IEEE Military Commun. pp. 1-7, Nov, 2008. 		International Conference on Mobile and Obiquitous Systems, Networking and Services, pp.3-11, July, 2005. Natue and A.Sethi, "Analysis of Wormhole Intrusion attacks in MANETs" IFFF Military Communications Conference		
		08.		
	18. F.Stanjano, R.A.	nderson, "The Resurrecting Duckling: Security Issues for Ubiquitous Computing," Vol. 35, pp. 22-26, Apr, 2002.		
	Networking, Svs	stems, Mobile Communications and Learning Technologies, Apr,2006.		
	20. H.Deng, W.Li a	and D.P.Agrawal, "Routing Security in Wireless Ad-Hoc Networks," University of Cincinnati, IEEE Communication		
	Magzine, Oct, 20	002. Md Liagat Ali "Security threats in Mohile Ad Hoo Natwork" Mastar Thesis Diskingo Institute of Toobholoov" Sweden		
	21. K. Diswas and P 22nd March 200	7		
	22. G. A. Pegueno a	and J. R. Rivera, "Extension to MAC 802.11 for performance Improvement in MANET", Karlstads University, Sweden,		
	23. S. Lu L Li K	Y Lam L. Jia. "SAODV: A MANET Routing Protocol that can Withstand Black Hole Attack." International Conference		
	on Computation	al Intelligence and Security, 2009.		
	Authors:	Priti Jadhao, Lalit Dole		

Paper Title:	Implementation of Secure Authentication Scheme for Mobile Device

16.	 Abstract: Authent on to a domain or used in various app credential to authe using an internet b the user's right to a Keywords: Image References: Fermi National A Bin Hu, Qi Xie, W. E. Burr, D. H Technology,2000 CA.Managing st Fadi Aloul, Sye Conference on C Do van Thanh; J Sensor Systems, Pernilla Stolpe University, Swed 	 ication is a fundamental aspect of system security. It confirms the identity of any user trying to log access network resources. Due to the numerous advantages of authentication systems, it can be plications. The common application involving authentication is, a computer program using a blind nticate to another program, Using a confirmation E-mail to verify ownership of an e-mail address, anking system, Withdrawing cash from an ATM .The main purpose of these systems is to validate ccess the system and information, and protect against identity theft and fraud. Processing, Watermarking Techniques, Walsh code, DCT (Discrete Cosine Transform). Accelerator Laboratory, Office of Science / U.S Department of Energy: Strong Authentication at Fermilab, Sept 2006 Yang Li- Automatic verification of password based authentication protocols using smart card (2011). P. Dodson, W. T. Polk. Electronic Authentication Guideline. Technical Report 800-63, National Institute of Standards and 8 <htp: 800-63="" csr.nist.gov="" nistpubs="" publications="" sp800-63v1_0_2.pdf="">.</htp:> rong Authentication: A Guide to Creating an Effective Management System, 2007. d Zahidi and Wassim El-Hajj "Two factor authentication using mobile phones" in Pro 2009 IEEE/ACS International 'omputer Systems and Applications, ISBN: 978-1-4244-3807-5. Iorstad, I Jonvik, T, Do van Thuan "Strong authentication with mobile phone as security token" in Pro Mobile Adhoc and 2009. MASS '09. IEEE 6th International Conference on. Johansson "Economic aspects of web authentication" in Project Report for Information Security Course Linköping ten. In 2011. 	76-78
	Authors:	Suprava Das, Rakesh Ch. Balabantaray	
	Paper Title:	Hybrid Approach for Transliteration of Odia Named Entity to English	
17.	 processes. This parentities of person, also created a dare performance improcest improcest for the second second	 per shows the design of a hybrid (rule based + fuzzy based) transliteration system for named location, organizations written in Odia script to English (Roman Script). For this purpose, we have tabase of specialized spelling i.e. location names, organization namesetc. which helped for overenet with accuracy 87%. iteration, Odia named entity, hybrid approach. p Kumar Naskar and Sivaji Bandyopadhyay, "A Modified Joint Source-Channel Model for Transliteration", Proceedings of 91-198, 2006. rapratap and KP CEN(2009) "English to Tamil Transliteration using WEKA system! International Journal of Recent Trends May 2009, Vol. 1, No. 1, pages: 498-500. Machine Transliteration System", In Proceedings of the 21st International Conference on Computational Linguistics and eting of the ACL (2006), pages: 1137-1144. t, Srivastava, Naskar and Way (2009) "English—Hindi Transliteration Using Context-Informed PB-SMT: the DCU System 4 Proceedings of the 2009 Named Entities Workshop, ACL-IJCNLP 2009, pages 104–107, Suntec, Singapore, 7 August AFNLP. <i>ra</i>, M.Kumar, Sujoy Das, "Rule Based Hindi to English Transliteration System for Proper Names", (IJCSIS) International uter Science and Information Security, Vol. 10, No. 8, August 2012. 	79-82
	Authors:	Davesh Singh Som, Parma Nand Astya, Ankur garg	
	Paper Title:	A Comparative Performance Analysis of AODV, DSR and TORA Routing Protocols in MAN	ETs
18.	 Abstract: A mobile ad not network is a concention of automonious moots modes that confinutate with each other over wireless links. It is seen that mobile ad hoc networks will be an integral part of next generation networks because of its flexibility, infrastructure less nature, ease of maintenance, auto configuration, self administration capabilities, and costs effectiveness. MANETs can operate without fixed infrastructure and can survive rapid changes in the network topology. They can be studied formally as graphs in which the set of edges varies in time. The main method for evaluating the performance of MANETs is simulation. In this paper, an attempt has been made to compare three well know protocols AODV, DSR and TORA by using two performance metrics packet delivery fraction and end to end delay by varying the number of nodes and pause time with identical environment conditions. The comparison has been done by using simulation tool NS2 which is the main simulator, NAM (Network Animator) and excel graph which is used for preparing the graphs from the trace files. Keywords: MANET, AODV, DSR, TORA. References: Amit N. Thakare, Mrs. M. Y. Joshi, "Performance Analysis of AODV & DSR Routing Protocol in Mobile Ad hoc Networks" IJCA Special Issue on "Mobile Ad-hoc Networks "MANETs 2010, pp. 211-218 Krishna Gorantala, "Routing Protocols in Mobile Ad-hoc Networks," MANETs 2010, pp. 211-218 Krishna Gorantala, "Routing Protocols in Mobile Ad-hoc Networks," More Science and Network Security (IJCSNS), VOL.7 No.1, pp. 77-84 November 2007. Elizabeth M. Royer and Chai-Keong Toch, "A review of current routing protocols for ad hoc mobile wireless networks", Technical report, University of California and Georgia Institute of Technology, USA, 1999, pp. 46-55 Anuj K. Gupta, Dr. Harsh Sadawarti, Dr. Anil K. Verma, "Performance analysis of AODV, DSR & TORA Routing Protocols" IACSIT		83-87

- Liu, Z.; Kwiatkowska, M.Z; Constantinou, C. A Biologically Inspired QOS Routing Algorithm for Mobile Ad Hoc Networks. In 19th International Conference on Advanced Information Networking and Applications, 2005; pp. 426–431.
 Luke Klein-Berndt, "A Quick Guide to AODV Routing", National Institute of Standards and Technology, US.
- Abdul Hadi Abd Rahman and Zuriati Ahmad Zukarnan, "Performance Comparison of AODV, DSDV and I-DSDV Routing Protocols in Mobile Ad Hoc Networks", European Journal of Scientific Research, ISSN 450-216X Vol.31 No.4, pp.566-576, 2009.
- 11. Padmini Misra, "Routing Protocols for Ad Hoc Mobile Wireless Networks"

12. Larry L. Peterson and Bruce S. Davie "Computer Networks – A Systems Approach", San Francisco, Morgan Kaufmann Publishers, fifth edition

13. M. Zonoozi and P. Dassanayake, "User mobility modeling and characterization of mobility patterns", IEEE Journal on Selected Areas in Communications, pp.1239-1252, September 1997.

14. Baruch Awerbuch and Amitabh Mishra, "Ad hoc On Demand Distance Vector (AODV) Routing Protocol", johns Hopkins university, US.