

Volume 2 Issue 3, February 2013

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

IJITEE

ISSN : 2278 - 3075

Website: www.ijitee.org



Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd.

Exploring Innovation: A Key for Dedicated Services

Address:

22, First Floor, ShivLoka Phase-IV,

Khajuri Kala, BHEL-Piplani, Bhopal (M.P.)-462021, India

Website: www.blueeyesintelligence.org

Email: director@blueeyesintelligence.org, blueeyes@gmail.com

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

Skype #: beiesp, Twitter #: beiesp

Editor In Chief

Dr. Shiv K Sahu

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

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

Dr. Shachi Sahu

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

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

Vice Editor In Chief

Dr. Vahid Nourani

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

Prof.(Dr.) Anuranjan Misra

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

Chief Advisory Board

Prof. (Dr.) Hamid Saremi

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

Dr. Uma Shanker

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

Dr. Rama Shanker

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

Dr. Vinita Kumari

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

Dr. Kapil Kumar Bansal

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

Dr. Deepak Garg

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

Dr. Vijay Anant Athavale

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

Dr. T.C. Manjunath

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

Dr. Kosta Yogeshwar Prasad

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

Dr. Dinesh Varshney

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

Dr. P. Dananjayan

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

Dr. Sadhana Vishwakarma

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

Dr. Kamal Mehta

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

Dr. CheeFai Tan

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

Dr. Suresh Babu Perli

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

Dr. Binod Kumar

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

Dr. Chiladze George

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

Dr. Kavita Khare

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

Dr. C. Saravanan

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

Dr. S. Saravanan

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

Dr. Amit Kumar Garg

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

Dr. T.C.Manjunath

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

Dr. P. Dananjayan

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

Dr. Kamal K Mehta

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

Dr. Rajiv Srivastava

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

Dr. Chakunta Venkata Guru Rao

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

Dr. Anuranjan Misra

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

Dr. Robert Brian Smith

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

Dr. Saber Mohamed Abd-Allah

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

Dr. Himani Sharma

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

Dr. Sahab Singh

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

Dr. Umesh Kumar

Principal: Govt Women Poly, Ranchi, India

Dr. Syed Zaheer Hasan

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

Dr. Jaswant Singh Bhomrah

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

Technical Advisory Board

Dr. Mohd. Husain

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

Dr. T. Jayanthi

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

Dr. Umesh A.S.

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

Dr. B. Kanagasabapathi

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

Dr. C.B. Gupta

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

Dr. Sunandan Bhunia

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

Dr. Jaydeb Bhaumik

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

Dr. Rajesh Das

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

Dr. Mrutyunjaya Panda

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

Dr. Mohd. Nazri Ismail

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

Dr. Haw Su Cheng

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

Dr. Hossein Rajabalipour Cheshmehgaz

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

Dr. Sudhinder Singh Chowhan

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

Dr. Neeta Sharma

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

Dr. Ashish Rastogi

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

Dr. Santosh Kumar Nanda

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

Dr. Hai Shanker Hota

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

Dr. Sunil Kumar Singla

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

Dr. A. K. Verma

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

Dr. Durgesh Mishra

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

Dr. Xiaoguang Yue

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

Dr. Veronica Mc Gowan

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

Dr. Mohd. Ali Hussain

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

Dr. Mohd. Nazri Ismail

Professor, System and Networking Department, Jalan Sultan Ismail, 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 Informatics, Automation, and Mathematics, Trnava, Slovakia

Dr. VS Giridhar Akula

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

Dr. S. Satyanarayana

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

Dr. Bhupendra Kumar Sharma

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

Dr. Praveen Agarwal

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

Dr. Manoj Kumar

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

Dr. Shaikh Abdul Hannan

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

Dr. K.M. Pandey

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

Prof. Pranav Parashar

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

Dr. Biswajit Chakraborty

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

Dr. D.V. Ashoka

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

Dr. Sasidhar Babu Suvanam

Professor & Academic 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, Chunche0nsi, Gangwondo, Korea

Dr. Sanjay M. Gulhane

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

Dr. K.K. Thyagarajan

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

Dr. P. Subashini

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

Dr. G. Srinivasrao

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

Dr. Rajesh Verma

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

Dr. Pawan Kumar Shukla

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

Dr. U C Srivastava

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

Dr. Reena Dadhich

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

Dr. Aashis. S. Roy

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

Dr. Sudhir Nigam

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

Dr. S. Senthil Kumar

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

Dr. Gufran Ahmad Ansari

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

Dr. R. Navaneetha krishnan

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

Dr. Hossein Rajabalipour Cheshmejjaz

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

Dr. Veronica McGowan

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

Dr. Sanjay Sharma

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

Dr. Taghreed Hashim Al-Noor

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

Dr. Madhumita Dash

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

Dr. Anita Sagadevan Ethiraj

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

Dr. Sibasis Acharya

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

Dr. Neelam Ruhil

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

Dr. Faizullah Mahar

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

Dr. K. Selvaraju

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

Dr. M. K. Bhanarkar

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

Dr. Sanjay Hari Sawant

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

Dr. Arindam Ghosal

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

Dr. M. Chithirai Pon Selvan

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

Dr. S. Sambhu Prasad

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

Dr. Muhammad Attique Khan Shahid

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

Dr. Kuldeep Pareta

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

Dr. Th. Kiranbala Devi

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

Dr. Nirmala Mungamuru

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

Dr. Srilalitha Giriya Kumari Sagi

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

Dr. Vishnu Narayan Mishra

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

Dr. Yash Pal Singh

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

Dr. Sripada Rama Sree

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

Dr. Rustom Mamlook

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

Managing Editor

Mr. Jitendra Kumar Sen

International Journal of Innovative Technology and Exploring Engineering (IJITEE)

Editorial Board

Dr. Saeed Balochian

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

Dr. Mongey Ram

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

Dr. Arupratan Santra

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

Dr. Ashish Jolly

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

Dr. Israel Gonzalez Carrasco

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

Dr. Guoxiang Liu

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

Dr. Khushali Menaria

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

Dr. R. Sukumar

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

Dr. Cherouat Abel

Professor, University of Technology of Troyes, France

Dr. Rinkle Aggrawal

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

Dr. Parteek Bhatia

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

Dr. Manish Srivastava

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

Dr. B. P. Ladgaonkar

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

Dr. E. Mohan

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

Dr. M. Shanmuga Priya

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

Dr. Leena Jain

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

Dr. S.S.S.V Gopala Raju

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

Dr. Ani Grubisic

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

Dr. Ashish Paul

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

Dr. Sivakumar Durairaj

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

Dr. Rashmi Nigam

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

Dr. Mu-Song Chen

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

Dr. Ramesh S

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

Dr. Nor Hayati Abdul Hamid

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

Dr. C.Nagarajan

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

Dr. Ilaria Cacciotti

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

Dr. V.Balaji

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

Dr. G. Anjan Babu

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

Dr. Damodar Reddy Edla

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

Dr. D.Arumuga Perumal

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

Dr. Roshdy A. AbdelRassoul

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

Dr. Aniruddha Bhattacharya

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

Dr. P Venkateswara Rao

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

Dr. V.Mahalakshmi M.L

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

S. No	Volume-2 Issue-3, February 2013, ISSN: 2278-3075 (Online) Published By: Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd.		Page No.	
1.	Authors:	Shrikant A. Thote, M.K. Sonpimple, G.D. Mehta		
	Paper Title:	An Approach to Find the Stresses Induced In a Flat Belt during Half Rotation of a Driving Pulley		
	<p>Abstract: Flat belt drive are the working horses of industries which is also called as loop of flexible material and are used to connect to or more rotating shaft mechanically for massive amount of power transmission. The main purpose of this thesis is to reason out the concept of failure of the belt during continuous operation and to see the stress pattern during half revolution of a pulley in a belt of a belt drive.</p> <p>Keywords: Belt Drive, Major & Minor Diameter of Pulley, Velocity ratio & Rated Power.</p> <p>References:</p> <ol style="list-style-type: none"> 1. "Transient Belt Stresses During Starting and Stopping: Elastic Response Simulated by Finite Element Methods", L. K. Nordell and Z. P. Ciozda, USA. 2. "Validation of a Flexible Multi body Belt-Drive Model" written by Gregor Čepo¹, Lionel Manin², Miha Boltežar³ from University of Ljubljana. 3. "On the Dynamics of Belt Drives", written by Zwiers, U. and Braun, M. Lehrstuhl für Mechanik, University at Duisburg–Essen, Lotharstraße1, D–47057 Duisburg, Germany. 4. "Dynamics of arm of a flat belt drive pulley with explanation of belt flutter" written by Pravin M. Singru a, Jayant P. Modak b, published in Journal of Sound and Vibration 279 (2005) 1037–1070 (Elsevier). 		1-4	
2.	Authors:	Fidelis C. Obodoeze, Francis A. Okoye, Calister N. Mba, Samuel C. Asogwa, Frank E. Ozioko		
	Paper Title:	A Holistic Mobile Security Framework for Nigeria		
	<p>Abstract: Since the inception of mobile telecommunication in Nigeria in 2002 as Global System for mobile Telecommunication(GSM) and Code Division for Multiple Access(CDMA), there has been a meteoric rise in the number of subscribers as well as the security challenges affecting the mobile telecommunication platforms. Security challenges such as hackers' attacks to personal data and corporate networks leading to loss of privacy and funds, the threats of malicious programs such as virus, worms, Trojans, bombs, etc as a result of massive interconnectivity to the internet by the majority of the subscribers using mobile phones as well as synchronization of mobile equipment to Personal Computers(PCs) and corporate networks, and the rampant theft of mobile equipment have been identified to constitute the greatest security challenges. This paper examines these challenges and carefully deduced from them the current existing attack models or patterns in the Nigeria telecommunication industry in order to formulate counter solutions to them. This paper finally proposed a five-model corrective and preventive security framework that can tackle and mitigate these identified security challenges if implemented.</p> <p>Keywords: holistic mobile security, Nigeria, malicious program, CDMA, GSM, smart phone, SIM, IMEI, intranet, security-triad, attack models</p> <p>References:</p> <ol style="list-style-type: none"> 1. National Mirror, "Telecoms: Nigeria's Teledensity hits 75.17%", Retrieved on December 28, 2012 from http://nationalmirroronline.net/new/business/telecoms-nigerias-teledensity-hits-75-17/. 2. Trendo Micro, "The rise of smart phones and the usage on the Internet: The security issues and solutions", Retrieved on December 18, 2012 from http://www.trendmicro.com/us/enterprise/product-security/mobile-security/index.html. 3. NCC, "Subscribers Data", Retrieved on December, 26, 2012 from http://www.ncc.gov.ng/index.php?option=com_content&view=article&id=125&Itemid=73. 4. F. C. Obodoeze, F.A. Okoye, S.C. Asogwa, C. N. Mba and F.E. Ozioko, "Enhanced Modified Security Framework for Nigeria Cashless Epayment System", International Journal of Advanced Computer Science and Applications (IJACSA), New York, USA, vol. 3, no.11, 2012, pp.189-196. 5. Mynaij.com, "Cashless Banking: Cyber Criminals Now Focus on Nigeria". Retrieved on 8th August, 2012 from http://news.naij.com/cashless_epayment_in_Nigeria/. 6. T. Strang, "Lecture, Topic: "Programming Mobile Devices, Security Aspects", WS2007/2008, University of Innsbruck. pp. 15,18,19,20. 7. F.C. Obodoeze, "Cyber Security for GSM Data Protection.", Master thesis submitted to Department of Electronic and Computer Engineering, Nnamdi Azikiwe University Awka, Nigeria., pp.84, November 2010. 8. E. Dulaney, "CompTIA Security+ Study Guide Fourth Edition", Sybex U.S.A., pp. 29-33. 		5-11	
3.	Authors:	Ali Hamidou, Amadou Diao, Séré Ahmed Douani, ali Moissi, Moustapha Thiame, Fabé Idrissa Barro, Grégoire Sissoko		
	Paper Title:	Capacitance determination of a Vertical Parallel Junction Solar Cell under Multispectral Illumination in Steady State		
	<p>Abstract: A theoretical study of a vertical junction silicon solar cell under multispectral illumination in steady state is presented. From the excess minority carrier's density in the base of the cell, the photocurrent density, the photovoltage, the diffusion capacitance and the dark capacitance were determined. All these parameters are studied according to the illumination level effect.</p> <p>Keywords: Vertical junction, solar cell, capacitance.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Neamen, D. A. "Semiconductor Physics and Devices Basic Principle" (2003), New York, McGraw-Hill. 2. B. MAZHARI and H.Morkoç, J. App. Phys. 73(11), (1993), pp.7509 –7514. 3. A. Gover, P. Stella, "Vertical multijunction solar cell one dimension analysis", IEEE Transactions on Electron Devices, Vol. Ed – 21, No.6 (1974), pp.351-356 4. G. E Ayvazian, G. H. Kirakosyan, G. A. Minasyan, "Characteristics of solar cells with vertical p-n junction", Proc.19th European 		12-14	

Photovoltaic Solar Energy Conference, (2004) pp.117 – 119.

5. B. Terheiden, G. Hahn, P. Fath, E. Bucher, "The Lamella silicon solar cell", Proc.16th European Photovoltaic Solar Energy Conference, (2000), pp.1377–1380.
6. M. M. Dione, S. Mbodji, M. L. Samb, M. Dieng, M.Thiame, S. Ndoye, F. I. Barro, G. Sissoko "Vertical junction under constant multispectral light: Determination of recombination parameters", Proceedings of the 24th European Photovoltaic Solar Energy Conference, (2009), pp.465– 469.
7. Arora, J.D, S.N. Singh and P.C. Mathur, "Surface Recombination effects on the performance of n+p step and diffused junction silicon solar cells", Solid State Electronics, 24(8) (1981) pp.739–747.
8. Jose Furlan and Slavko Amon, "Approximation of the carrier generation rate in illuminated silicon", Solid State Electr, Vol.28, No.12, (1985), p.1241-1243.
9. M. M. Dione, S. Mbodji, M. L. Samb, M. Dieng, M. Thiame, S. Ndoye, F. I. Barro, G. Sissoko, "Vertical junction under constant multispectral light: determination of recombination parameters", Proceedings of the 24th European photovoltaic solar energy conference and exhibition, Hamburg, Germany (sept 2009), 465 – 468.
10. F.I. Barro, M. Ndiaye, M. Deme, S. Mbodji, E. Ba, G. Sissoko, "Proceedings of the 23rd European photovoltaic solar energy conference and exhibition, (2008), p.608-611.
11. H.L. Diallo, A. Seidou Maiga, A. Wereme and G. Sissoko, "New Approach of Both Junction and Back Surface Recombination Velocities in a 3D Modelling Study of a Polycrystalline Silicon Solar Cell", The European Physical Journal, Applied Physics, Vol. 42, N°3, pp. 203 – 211, 2008.
12. G. Sissoko, B. Dieng, A. Correa, M. Adj and D. Azilinin, "Silicon Solar Cell Space Charge Region Width Determination by Modelling Study", Proceeding of the World Renewable Energy Conference and Exhibition, (1998), pp.1852 – 1855.

Authors:	K.Suryasen, Harish.A
Paper Title:	GUI Based Power System Simulation Tool
4.	<p>Abstract: GUI (Graphical User Interface) based simulation tool has been developed for power system simulation lab and it can be used as an educational tool for analysis of power system. GUI figure file is developed in MATLAB environment for performance of transmission line, Y bus formation, Power angle curve, Fault studies, line flow and losses. The user can enter the data and obtained the results quickly in the form of data or figures. The advantages of GUI based simulations are</p> <ul style="list-style-type: none"> • Less time required for execution • Students can solve and verify any power system problems in this area. • The user can observe the effect of changing any parameters on the output data. <p>An educational tool has been developed for the students to check the accuracy of their calculations and to observe the variations of input data and results and waveforms.</p> <p>Keywords: Graphical user interface, MATLAB, power system analysis</p> <p>References:</p> <ol style="list-style-type: none"> 1. William D Stevenson,Jr, Elements of Power System Analysis, Mc Graw Hill, Fourth Edition 1988 2. Stagg and El-Abiad, Computer methods in Power system Analysis, McGraw Hill , 1984 3. Savas Koç, Zafer Aydoğmus 'a mat lab/gui based fault simulation tool For power system education' Mathematical and Computational Applications, Vol. 14, No. 3, pp. 207-217, 2009. 4. Creating Graphical User Interface,' www.mathworks.com'
	15-18

Authors:	V.Srimaheswaran, R.Uthirasamy
Paper Title:	Cascaded Multilevel Inverter for PV Cell Application Using PIC Microcontroller
5.	<p>Abstract: The PV power generation have low efficiency due to the various constrains. This paper gives a new proposed method to improve the performance of the PV system. The PV cell is connected to boost chopper and Multi-Level Inverter (MLI). In order to improve the efficiency and for making the power generation available to the grid MLI is employed. MLI have emerged as attractive high power medium voltage converter to reduce harmonic component in the output current due to filter. In the proposed MLI there are 2-H bridge inverters to achieve the 5-level output voltage. A SPWM technique is used to generate the PWM signal for boost chopper inverter switches. Boost chopper is connected between the PV array and MLI. The purpose of boost chopper is to step-up the voltage and to produce continuous current to MLI. The simulation results are validated for the improvement in the PV cell system. The hardware is implemented with boost chopper and multilevel inverter. The PIC microcontroller is used to generate the PWM signal for boost chopper and inverter switches. Boost chopper output is fed to multilevel inverter and the stepped wave is obtained. The results obtained through simulation are verified with hardware results obtained.</p> <p>Keywords: PV Array, Boost Chopper, and Multi Level Inverter.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Juan Manuel Carrasco, Leopoldo Garcia Franquelo, "Power-Electronic Systems for the Grid Integration of Renewable Energy Sources: A Survey", IEEE Transactions on Power Electronics, Vol.53, No.4, pp 1002-1016, Aug 2006. 2. Jeyraj Selvaraj and Nasrudin Rahim A, "Multilevel Inverter for Grid- Connected PV System Employing Digital PI Controller", IEEE Transactions on Power Electronics, Vol.56, No.1, pp 149-158, Jan 2009. 3. Kuei-Hsiang Chao, Ching-Ju Li and Sheng-HanHo, "Modeling and Fault Simulation of Photovoltaic Generation Systems Using Circuit Based Model", in proceedings on IEEE-ICSET Annual Meeting, Taichung, Taiwan, 2008, pp 290-294. 4. SIEMENS Solar Module SP75 Specifications, Siemens Solar Industries,2002. 5. M.H.Rashid, Power Electronics: Circuits, Devices, and Applications, 3rd ed. Englewood Cliffs, NJ: Prentice- Hall, 2004. 6. X. Kou, K. Corzine and M. Wielebski, "Over distention Operation of Cascaded Multilevel Inverters", IEEE Transactions on Industrial Applications, Vol.42, No.3, pp 817–824, June 2006. 7. Martina Calais, Agelidis V.G, "A Transformer less Five Level Cascaded Inverter Based Single Phase Photovoltaic System ", in proceedings on IEEE-PESC Annual Meeting, Perth, Australia, 2001, Vol.3, pp 1173-1178. 8. Park S. J, Kang F. S, Lee M. H and Kim C. U, "A New Single-Phase Five Level PWM Inverter Employing a Deadbeat Control Scheme", IEEE Transactions on Power Electronics, Vol.18, No.18, pp 831-843, May 2003. 9. ESRAM T and Chapman P. L, "Comparison of Photovoltaic Array Maximum Power Point Tracking Techniques", IEEE Transactions on
	19-24

	Energy Conversion, Vol.22, No.2, pp 439-449, June 2007.		
6.	Authors:	Sagnik Bhattacharya, M. B. Panbu	25-29
	Paper Title:	Design and Development of Mobile Campus, an Android based Mobile Application for University Campus Tour Guide	
	<p>Abstract: Android is an open source mobile operating system based on Linux with java support. It comes under free and open source software licenses. As per first quarter Report of the year 2012, 400 million people are using Android based devices worldwide and 59% of smart phone market is occupied by android based smart phones [1]. Android provides the support of mobile map and GPS localization. Android based mobile tour-guide application can provide valuable information on different landmarks of a university campus and guide students/parents/visitors to find the desired places in campus with more ease. In this paper we are proposing a tour guide application called Mobile Campus on android based mobile platform for SRM University campus. Near field communication (NFC) is a set of standards for smart phones and similar devices to establish radio communication with each other by touching them together or bringing them into close proximity, usually no more than a few centimeters. This tour guide application includes functionality such as locating current location of users, showing university campus map, route direction of university shuttle and gives small description & contact information of important places on campus.</p> <p>Keywords: Android, Android Beam Bluetooth, Global Positioning System (GPS), Near Field Communication (NFC), (NFC Data Exchange Format (NDEF).</p> <p>References:</p> <ol style="list-style-type: none"> 1. Presented a Paper titled "OPCAMP-EA : Optimization of communication Architecture in Mobile Phones – Energy Awareness" in the 1st National Conference on "Cryptography and Network Security", Feb. 2009 2. Presented a Paper titled "Integration of offset PIN derivation methods in GSM system to prevent SIM cloning" in the 2nd National Conference on "Computing for Nation Development, 2008 3. Presented a Paper titled "Iris Recognition using Self-Organizing Neural Networks" in National Conference on Recent trends in Electrical, Electronics and Computer Engineering 2006 		
7.	Authors:	Jibrán Khan	30-34
	Paper Title:	Preliminary Results – Hyperspectral Image Analysis for Dolomite Identification in Tarbela Dam Region of Pakistan	
	<p>Abstract: The blessings of hyperspectral remote sensing are manifold and it has enabled researchers to locate, map and identify different materials on the surface of Earth. Hyperspectral remote sensing play a key role in mineral mapping activities and it can be a much powerful and cost effective tool for mineral development activities in a developing country like Pakistan where there are rich mineral resources but lack of means of extraction is still a constraint in their efficient usage for betterment of country's economy. In this paper we investigate the adequacy of the hyperspectral remote sensing data acquired by Earth Observing -1 (EO-1) hyperspectral sensor, over an area of Tarbela Dam region (Lat. 320 05'N, Long. 720 41' E), which is a rich mineral resource of Pakistan. Many notable minerals have been found in this region among which analysis of identification of dolomite through hyperspectral imagery of Tarbela Dam region is the major aspiration of this research article. The results presented in this paper may refer to the preliminary steps that can be taken for minerals identification using hyperspectral imaging in Pakistan. The analysis of spectral signature of the dolomite which is a sedimentary carbonate rock and a mineral both composed of calcium magnesium carbonate is described through software Erdas IMAGINE®. However large noise ratio showed to represent a constraint for dolomite identification as it is likely to conceal spectral information due to rocks and vegetation cover. In the end, we suggest some techniques to help improve these analyses.</p> <p>Keywords: Hyperspectral remote sensing, Tarbela Dam, spectral information, noise ratio, mineral mapping.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Muhammad Ahmad, Sungyoung Lee, Ihsan UI Haq and Qaisar Mushtaq (2012), "Hyperspectral Remote Sensing: Dimensional Reduction and End Member Extraction" in International Journal of Soft Computing and Engineering (IJSCE), Vol. 2 (6), pp. 170-175. 2. Alvaro Penteado Crosta and Carlos Roberto De Souza Filho (2000), "Hyperspectral Remote Sensing for Mineral Mapping: A Case-Study at Alto Paraiso De Goias, Central Brazil" Revista Brasileira de Geociências, Vol. 30(3), pp. 551-554. 3. P. Shippert (2003), "Introduction to Hyperspectral Image Analysis", Online Journal of Space Communication, Ohio University, Athens, OH 45701, US online at http://spacejournal.ohio.edu/pdf/shippert.pdf, accessed 4 Jan 2013. 4. Pakistan Mineral Development Corporation (PMDC 2012), "PMDC at a Glance" online at http://www.pmdc.gov.pk/, accessed 30 Dec 2012. 5. C. Lorrain and N. Pasche (2007), "Tarbela Dam Case Study" Report of Swiss Federal Institute of Technology, Rämistrasse 101 8006 Zurich, Switzerland. 6. Pakistan Water and Power Development Authority (WAPDA 2011), "Tarbela 4th Extension Hydropower Project – Environment and Social Assessment" online at http://www.wapda.gov.pk/pdf/tarbelaassessment.pdf, accessed 15 Dec 2012. 7. James A. Calkins, Terry W. Offield, S.K.M. Abdullah and S. Tayyab Ali (1975), "Geology of the Southern Himalaya in Hazara, Pakistan, and Adjacent Areas" A Geological Survey Professional Paper 716-C by United States Geological Survey (USGS) prepared in cooperation with Geological Survey of Pakistan online at http://pubs.usgs.gov/pp/0716c/report.pdf, accessed 15 Dec 2012. 8. Fred A. Kruse (2003), "Preliminary Results – Hyperspectral Mapping of Coral Reef Systems Using EO-1 Hyperion, Buck Island, U.S Virgin Islands" in 12th Jet Propulsion Laboratory (JPL) Airborne Geoscience Workshop, Pasadena, California. 9. USGS (2012), online at http://www.usgs.gov, accessed Dec 12, 2012 10. USGS Earth Resource Observation and Science (EROS) Center, EO-1 (Earth Observing-1) Product Description online at http://eros.usgs.gov/#/Find_Data/Products_and_Data_Available/ALI, accessed 15 Dec 2012. 11. J. Pearlman, Stephen Carman, Paul Lee, Lushalan Liao, and Carol Segal (1999), "Hyperion Imaging Spectrometer on the New Millennium Program Earth Orbiter -1 System", in Proceedings , International Symposium on Spectral Sensing Research (ISSR), Systems and Sensors for the New Millennium, published on CD-ROM, International Society on for Photogrammetry and Remote Sensing (ISPRS). 12. Jay Pearlman, Carol Segal, Lushalan Liao, Steve Carman, Mark Folkman, Bill Browne, Lawrence Ong and Stephen Ungar (2000), "Development and Operations of the EO-1 Hyperion Imaging Spectrometer", Technology Validation Report, Electro-Optical Systems and Technology Department, Goddard Space Flight Center (GSFC), NASA online at http://eo1.gsfc.nasa.gov/new/validationReport/Technology/TRW_EO1%20Papers_Presentations/05.pdf, accessed 10 Jan 2013. 		

	<p>13. F.A. Kruse, J. W. Broadman and J.F. Huntington (2002), "Comparison of EO-1 Hyperion and Airborne Hyperspectral Remote Sensing Data for Geologic Applications" in Proceedings, SPIE Aerospace Conference, Big Sky, Montana, IEEE Catalog Number 02TH8593C, Paper # 6.0102, 12p.</p> <p>14. Satellite Imaging Corporation (2012), "Characterization of Satellite Remote Sensing Systems" [online at http://www.satimagingcorp.com/characterization-of-satellite-remote-sensing-systems.html, accessed 12 Dec 2012].</p> <p>15. USGS (2012), "Sensors – Hyperion" online at http://eo1.usgs.gov/sensors/hyperion, accessed 12 Dec 2012.</p> <p>16. F. H. Goetz, G. Vane, J. Solomon and B. Rock (1985), "Imaging spectrometry for earth remote sensing" in Airborne Imaging Spectrometer Data Analysis Workshop, JPL publication, vol. 228, pp. 22-29.</p> <p>17. R. O. Green, B. Pavri, J. Faust and O. Williams (1998), "AVIRIS Radiometric Laboratory Calibration, In Flight Validation, and a Focused Sensitivity Analysis", NASA Jet Propulsion Laboratory, California Institute of Technology, Pasadena, CA.</p> <p>18. Haq U. I. and Xu X. (2008), "A New Approach to Band Clustering and Selection for Hyperspectral Imagery", IEEE Proceedings on Signal Processing, pp. 1198-1202, ICSP.</p> <p>19. Kruse, F. A., Boardman, J. W., and Huntigton, J. F. (2003), "Comparison of Airborne Hyperspectral Data and EO-1 Hyperion for Mineral Mapping", IEEE Aerospace Conference Proceedings, IEEE Transactions on Geoscience and Remote Sensing, 41 (6), pp. 1388-1400.</p> <p>20. Rowan, L. C., Simpson, C. J., and Mars J. C. (2004), "Hyperspectral Analysis of the Ultramafic Complex and Adjacent Lithologies at Mordor, NT, Australia", Remote Sensing of Environment, 91, pp. 419- 431.</p> <p>21. Hubbard, B. and Crowley, J.K. (2005), "Mineral Mapping on the Chilean-Bolivian Altiplano using co-orbital ALI, ASTER and Hyperion Imagery: Data Dimensionality Issues and Solutions", Remote Sensing of the Environment, 99 (1-2), pp. 173-186.</p> <p>22. Van Ruitenbeek, F. J. A., Debba, P. Van Der Meer, F. D., Cudahy, T., Van Der Meijde, M., and Hale, M. (2006), "Mapping White Micas and Their Absorption Wavelengths Using Hyperspectral Band Ratios", Remote Sensing of Environment, No. 102, pp. 211-222.</p> <p>23. San, B. T. (2008), "Hyperspectral Image Processing of EO-1 Hyperion Data for Lithological and Mineralogical Mapping", PhD. Thesis, METU, Department of Geological Engineering, 142p.</p> <p>24. B.T. San and M.L. Suzen (2010), "Evaluation of Different Atmospheric Correction Algorithms for EO-1 Hyperion Imagery", International Archives of the Photogrammetry, Remote Sensing and Spatial Information Science, Volume XXXVIII, Part 8, Kyoto, Japan.</p> <p>25. Hannu Holma, Antti-Jussi Mattila, Aappo Roos, Timo Hyvärinen and Oliver Weatherbee (2011), "Thermische Hyperspektralbildung im langwelligen Infrarot" Technical article – Optical Metrology, Photonik.</p> <p>26. Lillesand, T.M. and Kiefer, R.W. (1999), Remote Sensing and Image Interpretation, John Wiley & Sons, Inc, 9-10, pp. 592-597.</p> <p>27. Prashant Kawishwar (2007), "Atmospheric Correction Models for Retrievals of Calibrated Spectral Profiles from Hyperion EO-1 Data", MS Thesis, International Institute for Geo-Information Science and Earth Observation, The Netherlands, and Indian Institute of Remote Sensing, Department of Space, Dehradun, India, pp. 1.</p> <p>28. Adams, J. B., and Gillespie, A. R. (2006), Remote Sensing of Landscapes with Spectral Images: A Physical Modeling Approach, Cambridge University Press, pp. 362.</p> <p>29. GEOSYSTEMS GmbH, Germany (2012), "ATCOR (ATmospheric CORrection) for Erdas IMAGINE®", online at http://www.geosystems.de/atcor/index.html, accessed 12 Dec 2012.</p>					
8.	<table border="1"> <tr> <td>Authors:</td> <td>Jyotirmayee Rautaray, Raghvendra Kumar</td> </tr> <tr> <td>Paper Title:</td> <td>Distributed Database using Randomized Response Technique in FP Tree Algorithm</td> </tr> </table>	Authors:	Jyotirmayee Rautaray, Raghvendra Kumar	Paper Title:	Distributed Database using Randomized Response Technique in FP Tree Algorithm	
Authors:	Jyotirmayee Rautaray, Raghvendra Kumar					
Paper Title:	Distributed Database using Randomized Response Technique in FP Tree Algorithm					
	<p>Abstract: Data mining is broadly used in all walks of existence. Through the association rule mining, the practical storage space location of commodities can be found. This paper mainly uses FP-tree algorithm and combines with distributed secure sum protocol as well as secure multi party computation using randomized response technique to provide the more privacy to the distributed database in the homogeneous horizontal partitioned distributed environment.</p> <p>Keywords: Distributed Secure Sum Protocol, FP Tree Algorithm, Randomized response technique, Secure Multi Party Computation.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Agrawal, R., et al.: Mining association rules between sets of items in large database. In: Proc. of ACM SIGMOD'93, D.C., 1993,pp.207-216 ACM Press, Washington. 2. Agarwal, R., Imielinski, T., Swamy, A.: Mining Association Rules between Sets of Items in Large Databases. In Proceedings of the 1993 ACM SIGMOD International Conference on Management of Data, 1993, pp. 207-210. 3. Srikant, R., Agrawal, R.: Mining generalized association rules. In: VLDB'95,1994, pp.479-488 . 4. Agrawal, R., Srikant, R.: Privacy-Preserving Data Mining. In: proceedings of the 2000 ACM SIGMOD on management of data, 2000, pp. 439-450. 5. Lindell, Y., Pinkas, B.: Privacy preserving Data Mining. In: Proceedings of 20th Annual International Cryptology Conference (CRYPTO) 2000. 6. Kantarcioglu, M., Clifton, C.: Privacy-Preserving distributed mining of association rules on horizontally partitioned data. In IEEE Transactions on Knowledge and Data Engineering Journal, IEEE Press, Vol 16(9), 2004, pp.1026-1037. 7. Han, J. Kamber, M.:Data Mining Concepts and Techniques. Morgan Kaufmann, San Francisco, 2006. 8. Sheikh, R., Kumar, B., Mishra, D, K.: A Distributed k- Secure Sum Technique for Secure Multi-Site Computations. Journal of Computing, Vol 2, 2010, pp.239-243. 9. Sugumar, Jayakumar, R., Rengarajan, C.:Design a Secure Multi Site Computation System for Privacy Preserving Data Mining. In International Journal of Computer Science and Telecommunications, Vol 3, 2012, pp.101-105. 10. Muthu Lakshmi, N. V., Sandhya Rani, K.: Privacy Preserving Association Rule Mining without Trusted Site for Horizontal Partitioned database. In International Journal of Data Mining & Knowledge Management Process (IJDKP) Vol.2, 2012, pp.17-29. 11. Muthu lakshmi, N.V., Sandhya Rani, K.: Privacy Preserving Association Rule Mining in Horizontally Partitioned Databases Using Cryptography Techniques. In International Journal of Computer Science and Information Technologies(IJCSIT), Vol. 3 (1),2012 , PP. 3176 – 3182. 12. Goldreich, O., Micali, S. & Wigerson, A.: How to play any mental game. In: Proceedings of the 19th Annual ACM Symposium on Theory of Computing, pp.218-229. 13. Franklin, M., Galil, Z. & Yung, M.:An overview of Secured Distributed Computing. Technical Report CUCS- 00892, Department of Computer Science, Columbia University. 	35-39				
9.	<table border="1"> <tr> <td>Authors:</td> <td>Sudakshina Dasgupta, Paramartha Dutta</td> </tr> <tr> <td>Paper Title:</td> <td>A Novel Game Theoretic Approach for Cluster Head Selection in WSN</td> </tr> </table> <p>Abstract: In recent years wireless sensor network (WSN) is an active domain of research. A WSN consists of a number of sensor nodes each with limited energy, bandwidth, storage and processing capabilities. Clustering is one of the basic approaches that offer a practical way of providing scalability when designing a large and dense sensor networks. One of the approaches to enhance the survivability of WSN is to allow only some sensor nodes in a cluster of sensor nodes, called cluster heads, to communicate with the base station. In this paper we have proposed a Game</p>	Authors:	Sudakshina Dasgupta, Paramartha Dutta	Paper Title:	A Novel Game Theoretic Approach for Cluster Head Selection in WSN	40-43
Authors:	Sudakshina Dasgupta, Paramartha Dutta					
Paper Title:	A Novel Game Theoretic Approach for Cluster Head Selection in WSN					

theoretic approach for selecting a cluster head for every cluster in a WSN. Games can be a single round or repetitive. The scope a player enjoys in making his or her moves constitutes the player's "strategy". Rules govern the outcome for the set of moves taken by the players and outcomes produce payoffs for the various players which can be expressed by means of a payoff matrix. However, the clustering problem in wireless sensor network, related to self-organization of nodes into large groups and selection of head, has not been studied under this framework. In this work, our goal is to provide a game theoretical modeling of cluster-head selection for wireless sensor networks. A game of scheduling of nodes for taking the responsibility of cluster head, is an interactive decision making process between a set of self-interested nodes.

Keywords: Game Theory, payoff, clustering, Wireless sensor network, Cluster head.

References:

1. Nima Jafari Navimipour, Sara Halimi Shabestari, Vahid Samadzad Samacii, "Minimize Energy Consumption and Improve the lifetime of Heterogeneous Wireless Sensor Networks by using Monkey Search Algorithm", 2012 International Conference on Information and Knowledge Management, IPCSIT Vol. 45, pp. 42-47.
2. Dang Nguyen, Pascale Minet, Thomas Kunz and Louise Lamont, "On the Selection of Cluster Heads in MANETS", International Journal of Computer Science Issues, Vol. 8, Issue 2, March 2011, pp. 1-12.
3. R.Valli, P.Dananjayan, "Utility enhancement by power control in WSN with Different topologies using Game theoretic approach", CIT'11 Proceedings of the 5th WSEAS international conference on communications and Information Technology, pp. 85-89, ISBN: 978-1-61804-018-3, 2011.
4. Georgios Koltsidas, Fotini-Niovi Pavlidou., "A Game Theoretical Approach to clustering of AdHoc and Sensor Networks", Telecommunication system Volume 47, Numbers 1-2, pp 81-93, June 2011.
5. Vivek Katiyar, Narottam Chand and Surender Soni , "A Survey on Clustering Algorithms for Heterogeneous Wireless Sensor Networks", Int. J. Advanced Networking and Applications Vol. 02, Issue 4, pp. 745-754(2011).
6. K.Ramesh and Dr K.Somasundaram, "A Comparative Study of Cluster head Selection Algorithm In Wireless Sensor Networks", International Journal of Computer Science Engineering Survey (IJCSSES) , Vol.2, No.4, November 2011.
7. Kiran Maraiya, Kamal Kant, Nitin Gupta, "Efficient Cluster Head Selection Scheme for Data Aggregation in Wireless Sensor Network", International Journal of Computer Applications (0975 - 8887) Vol.23, No.9, pp. 10-18, June 2011.
8. J.Ralbi, Dr. G.Rajendran, "An Enhanced LEACH protocol using Fuzzy logic for Wireless Sensor Network ", International Journal of Computer Science and Information Security Vol. 8 No. 7, pp. 189-194, 2010.
9. B. Bejar, P. Belanovic and S. Zazo , " Cooperative Localisation in Wireless Sensor Networks Using Coalitional Game Theory" ,European Signal Processing Conference , EUSIPCO-2010, pp. 1459-1463, ISSN 2076-1465.
10. Fatemeh Kazemeyni, Einar Broch Johnsen, Olaf Owe, and Ilango Balasingham, "Grouping Nodes in Wireless Sensor Networks using Coalitional Game Theory", In J.Hatcliff and E.Zucca, editors, Formal Techniques for Distributed Systems, Proc. FMOODS FORTE'09, Vol. 6117 of Lecture notes in Computer Science, pp. 95-109, Springer, 2010. 95-109.2010.
11. Shamik Sengupta, Mainak Chatterjee and Kevin A. Kwiat, "A Game Theoretic framework for power control in Wireless sensor networks", IEEE Transactions on computers, February 2010 ,vol. 59 no. 2, pp 231-242.
12. S.Dasgupta, P.Dutta, "An Improved Leach approach for Head selection Strategy in a Fuzzy-C Means induced Clustering of a Wireless Sensor Network", IEMCON 2011 organized by IEM, Kolkata, in collaboration with IEEE on 5th 6th of Jan 2011, pp. 203-208.
13. Pau cloasas, Alba Pages Zamore and Jaun A For nandez Rubio, "Game Theoretical algorithm for joint power and topology control in distributed WS ", In proceedings of IEEE International Conference on Acoustics, speech and signal Processing , Taipei April pp. 2765-2768.
14. Quan Zhou, Xiaowei Li, Yongjun Xu, "Mean Shift Based Collaborative Localization with Dynamically Clustering for Wireless Sensor Networks", International Conference on Communications and Mobile Computing, 2009, vol. 2 , pp 66-70.
15. Renita Machado, Sirin Tekinay, "A Survey of game-theoretic approaches in wireless sensor networks", Computer networks vol.52, issue 16, Nov 2008 pp. 3047-3061.
16. Lun Zhang, Yan Lu, Lan Chen, Decun Dong, "Game Theoretical Algorithm for Coverage Optimization in Wireless Sensor Networks", Proceedings of the world Congress on Engineering 2008 vol. 1, WCE 2008, July 2-4, ISBN:978-988-98671-9-5.
17. Allen mac Kenzie ,Luiz DaSilva, "Game Theory for Wireless Engineers, Morgan Claypool Publishers, Synthesis lectures on communications, 2006, vol. 1, No. 1, pp 1-86.
18. Indranil Gupta, Riordan, D .Srinivas Sampalli, "Cluster head election using Fuzzy logic for Wireless Sensor Network", Communication Networks and Service Research Conference publications , May 2005, pp. 255-260.
19. O. Younis, S. Fahmy, "HEED: A Hybrid, Energy-Efficient, Distributed clustering approach for Ad Hoc sensor networks", IEEE Transactions on Mobile Computing 3 (4), (2004)366-379.
20. S. Bandyopadhyay and E. J. Coyle, "An Energy Efficient Hierarchical Clustering Algorithm for Wireless Sensor Networks", IEEE INFOCOM April 2003, Vol. 3, pp. 1713-1723.
21. F. Akyildiz, W. Su, Y. Sankarasubramaniam, and E. Cayirci, "A Survey on Sensor Networks", IEEE Communications Magazine, vol. 40, no. 8, pp. 102-114, Aug 2002.
22. A. Manjeshwar and D.P. Agarwal, "APTEEN: a hybrid protocol for efficient routing An comprehensive information retrieval in wireless sensor networks", Parallel and Distributed Processing Symposium. Proceedings International, IPDPS 2002, 195-202.
23. S. Lindsey and C.S. Raghavendra, "PEGASIS, power efficient gathering in sensor Information systems", Proceedings of the IEEE Aerospace Conference, BigSky, Montana March 2002.
24. W. B. Heinzelman, A. P. Chandrakasan, H. Balakrishnan, Application specific protocol architecture for wireless microsensor networks", IEEE Transactions on Wireless Networking, Vol. 1, No. 4, pp. 660-670 (2002).
25. A. Manjeshwar and D.P. Agrawal, "TEEN: a protocol for enhanced efficiency in wireless sensor networks", Proceedings of the 1st International Workshop on Parallel and Distributed Computing Issues in Wireless Networks and Mobile Computing, San Francisco, CA, April 2001.
26. A.B. Mackenzie and S.B Wicker, " Game theory and the design of self-organizing, adaptive wireless networks. IEEE communication Magazine", 39(11): 126-131, Nov, 2001.
27. W. Heinzelman, A. Chandrakasan and H. Balakrishnan, "Energy-efficient Communication protocol for wireless microsensor networks", In Proceedings of the 33rd Annual Hawaii International Conference on System Sciences, 2000, no. 10, vol.2, Jan. 2000, 4-7.
28. Yizong Chen "Mean Shift, Mode Seeking, and Clustering", IEEE Transactions on pattern analysis and machine intelligence, Vol.17, No. 8, pp. 790-799, August 1995.

10.	Authors:	Deepti Tak, Shalini Rajawat, Vijay Singh Rathore	44-47
	Paper Title:	High Performance Computation Through Slicing and Value Replacement with CCDD Approach	
	Abstract: In software development and maintenance stages, programmers need to frequently debug the software. Software fault localization is one of the most exclusive, tedious and time intense activities in program debugging. A common approach to fix software error is computing suspiciousness of program elements according to failed test executions and passed test executions. However, this technique does not give full consideration to dependences		

between program elements and therefore it reduce the ability for efficient fault localization. Developers must identify statements involved in failures and select suspicious statements that may contain faults. Our paper presents a new technique that identify statements involved in failure –those executed by failed test cases through narrowing the search domain using Slicing Technique (Control and Data dependence slice) by slicing the program and making it more effective with the CCDD (Coupling Control and Data Dependency) approach in Value Replacement. The proposed approach is more efficient and is more accurate in locating statements that directly\indirectly effect the faulty statements. This approach can also be applied to many other research areas.

Keywords: CCDD (Coupling Control and Data Dependency) approach, Slicing Technique, Value Replacement

References:

- [1] J. S. Collofello and S. N. Woodfield. Evaluating the effectiveness of reliability-assurance techniques. *Journal of Systems and Software*, 9(3):191-195, 1989.
- [2] H. Agrawal and J. R. Horgan. Dynamic program slicing. *Proceedings of the ACM SIGPLAN '90 Conference on Programming Language Design and Implementation*, pages 246{256, June 1990.
- [3] B. Korel and J. Laski. Dynamic program slicing. *Information Processing Letters*, 29(3):155{163, October 1988.
- [4] S. Qadeer and J. Rehof. Context-bounded model checking of concurrent software. *Tools and Algorithms for the Construction and Analysis of Systems*, pages 93{107, April 2005.
- [5] X. Zhang, N. Gupta, and R. Gupta. Pruning dynamic slices with confidence. *ACM SIGPLAN Conference on Programming Language Design and Implementation*, pages 169{180, June 2006
- [6] X. Zhang and R. Gupta. Cost effective dynamic program slicing. *ACM SIGPLAN Conference on Programming Language Design and Implementation*, pages 94{106, June 2004.
- [7] M. Weiser, "Program slicing," In *Proceedings of the 5th International Conference on Software Engineering*, San Diego, California, United States, 1981.
- [8] S. Horwitz, T. Reps, and D. Binkley, "Interprocedural slicing using dependence graphs," *ACM Trans. Program. Lang. Syst.*, vol. 12, pp. 26-60, 1990.
- [9] H. Agrawal and J. R. Horgan, "Dynamic program slicing," In *Proceedings of the ACM SIGPLAN 1990 Conference on Programming Language Design and Implementation*, White Plains, New York, United States, 1990.
- [10] Z. Chen and B. Xu, "Slicing object-oriented java programs," *SIGPLAN Not.*, vol. 36, pp. 33-40, 2001.
- [11] B. Xu, J. Qian, X. Zhang, and et al., "A brief survey of program slicing," *SIGSOFT Softw. Eng. Notes*, vol. 30, pp. 1-36, 2005
- [12] J.Sun,Zhshu Li, Jianchen Ni,et al. Software Fault Localization Based on Testing Requirement and Program Slice[C]: IEEE Computer Socitey, 2007
- [13] D.Jeffrey, N.Gupta, fault localization Using Value Replacement[C].ACM July 20-24

Authors:	Md. Abu Raihan, Seung Lock Han
Paper Title:	Situation Analysis of Engineering Institutions for Interactive & Collaborative Web-based e-Learning: Case of Bangladesh

Abstract: Aims of the study were to investigate physical facilities of technical and vocational education and training (TVET) classrooms, to assess infrastructural conditions of TVET institutions, to find out existing instructional problems of TVET institutions, and to identify the needs & weakness of TVET students to introduce interactive & collaborative Web-based eLearning. A great deal of efforts has been made by the researchers to analysis the current situations of TVET in terms of classroom facilities & infrastructural conditions. 210 classrooms from 45 TVET institutions were observed to collect data carried out by the study. 477 students, 187 teachers, & 86 Lab attendants of TVET have given their opinions. Based on findings & results of analysis the needs, weakness & existng problems of instructions, the study suggest interactive & collaborative methodology. Value of the findings will have to consider integrating Web-technologies in teaching-learning in future proposed by the study.

Keywords: Physical facilities & Infrastructural

References:

1. Abrami, P.C. (2001). Understanding and promoting complex learning using technology. *Educational Research and Evaluation*, 7(2-3), 113-136.
2. Allen, E., & Seaman, J. (2003). Seizing the opportunity: The quality and extent of online education in the United States, 2002 and 2003. *Retrieve January 2, 2013, from http://www.sloanc.org/reesources/sizing_opportunity.pdf*
3. Bereiter, C., & Scardamalia, M. (2006). Education for the knowledge age: Design-centered models of teaching and instruction. In P. A. Alexander & P. H. Winne (Eds.), *Handbook of educational psychology* (pp.695-713). Mahwah, NJ: Lawrence Erlbaum Associates.
4. Bleed, R. (2001). A hybrid campus for the new millennium [Electronic Version]. *Educause Review*. Retrieved December 31, 2012, from <http://www.educause.edu/ir/library/pdf/erm0110.pdf>
5. Bonk, C.J., & Cunningham, D.J. (1998). Searching for learnercentered, constructivist, and socio-cultural components of collaborative educational learning tools. In C.J. Bonk & K.S. King (Eds.),*Electronic collaborators* (pp.25-50). Mahwah, NJ: Lawrence Erlbaum Associations.
6. Carr-Chellman, A., Dyer, D., & Breman, J. (2000). Burrowing through the network wires: Does distance detract from collaborative authentic learning? [Electronic Version]. *Journal of Distance Education*, 15. Retrieved January 20, 2013, from <http://cade.icaap.org/vol15.1/carr.html>
7. Fung, Y.H. (2004). Collaborative online learning. Interaction pattern and limiting factors. *Open Learning*, 19(2), 54-72.
8. Gaddis, B., Napierkowsk, H., Guzman, N., & Muth, R. (2000). A comparison of collaborative learning and audience awareness in two components-mediated writing environments. Paper presented at the Association for Educational Communication and Technology, Denver, CO.
9. Gay, L. R. & Airasian, P. (2003). *Educational Research*, Person Education, Inc., Upper saddle River, New Jersey 07458,131-132.
10. Hara, N., & Kling, R. (2000). Students" distress with a Web-based distance education course. *Information, Communication, & Society*, 3(4), 557-579.
11. Harasim, L. M. (1990). Online Education: An environment for collaboration and intellectual amplification. In L. M. Harasim (Ed.), *Online education: Perspectives on a new environment* (pp. 39-67). New York: Praeger.
12. Johnson, J. (2002). Reflections on teaching a large enrollment course using hybrid format [Electronic Version]. *Teaching with Technology Today*, 8. Retrieved November 21, 2012, from <http://www.uwsa.edu/tt/articles/jjohnson.htm>
13. Kitchen, D., & McDougall, D. (1998). Collaborative learning on the Internet. *Journal of Educational Technology System*, 27(3), 245.
14. Moore, M.G. (1989). Editorial: Three types of interaction. *American Journal of Distance Education*, 3(2), 1-7.
15. Scardamalia, M. (2002). Collective Cognitive responsibility for the advancement of knowledge. In B. Smith (Ed.), *Liberal education in the knowledge society* (pp. 67-98). Chicago: Open Court.
16. Stacey, E. (1999). Collaborative learning in an online environment. *Journal of Distance Education*, 14(2), 14-33.

11.

48-53

	<p>17. Tiangha, T. (2003). Gauntlet news-blended learning: Wave of the future? Retrieved December 21, 2012, from http://gauntlet.ucalgary.ca/a/story/6848.</p> <p>18. Troha, F.J. (2002). Bulletproof instructional design: A model for blended learning. [Electronic Version]. USDLA Journal, 16. Retrieved June 16, 2012, from http://www.usdla.org/html/journal/MAY02_Issue/article03.html</p> <p>19. Vygotsky, L.S. (1978). Mind and Society: The development of higher mental processes. Cambridge, MA: Harvard University Press.</p> <p>20. Wagner, E.D. (1994). In support of functional definition of interaction. American Journal of Distance Education, 8(20), 6-29.</p> <p>21. Zemsky, R., & Massy, W. (2004). Thwarted innovation: What happened to e-learning and why. Retrieved June, 15, 2012, from http://www.irhe.upenn.edu/Docs/Jun2004/ThwartedInnovation.pdf</p>	
12.	<p>Authors: Shibin D, Blessed Prince P</p> <p>Paper Title: Survey on Efficient and Forward Secure Schemes for Unattended WSNs</p> <p>Abstract: Unattended Wireless Sensor Networks face challenges in providing good security and in showing good performance. The lack of communication with the final data receivers is the main reason for this. It is possible for the UWSNs to gather the sensible data for long time. These data are vulnerable to adversaries who can compromise the sensors and maneuver the sensed data. This paper describes how various methodologies are used to act against the adversaries troubling the UWSNs. The various cryptographic measures have to take the vulnerabilities into consideration thus making the network improve its performance and security. In this survey paper, a detailed study about the various schemes that increase the efficiency and performance of UWSNs and the measures taken to improve forward security are given.</p> <p>Keywords: Aggregate Signature, Digital Signatures, Forward-Secure Property, HaSAFSS Scheme, Keying materials, Overhead, Unattended Wireless Sensor Networks.</p> <p>References:</p> <ol style="list-style-type: none"> 1. R. Nowak, U. Mitra, "Boundary Estimation in Sensor Networks: Theory and Methods," Proceedings of the 2nd Workshop on Information Processing in Sensor Networks (IPSN'03), Palo Alto, CA, Apr. 2003. 2. K. Sohraby et al., "Protocols for Self-Organization of a Wireless Sensor Network," IEEE Personal Communications, Vol. 7, No. 5, Oct. 2000, pp. 16ff. 3. A. Cerpa, D. Estrin, "ASCENT: Adaptive Self-Configuring Sensor Networks Topologies," Proceedings of the 21st Annual Joint Conference of the IEEE Computer and Communications Societies (InfoCom'02), New York, Vol. 3, June 2002. 4. H. Gupta et al., "Connected Sensor Cover: Self-Organization of Sensor Networks for Efficient Query Execution," Proceedings of the 4th ACM International Symposium on Mobile Ad Hoc Networking and Computing (MobiHoc'03), Annapolis, MD, June 2003. 5. Q. Huang et al., "Fast Authenticated Key Establishment Protocols for Self-Organizing Sensor Networks," Proceedings of the 2nd Workshop on Sensor Networks and Applications (WSNA'03), San Diego, CA, Sept. 2003. 6. Kazem Sohraby, Daniel Minoli, Taieb Znati, Wireless Sensor Networks - Technology, Protocol and Applications, Second edition, 1991. 7. G. Edwin Prem Kumar et al, "A Comprehensive Overview on Application of Trust and Reputation in Wireless Sensor Network" International Conference on Modelling Optimization and Computing, 2012. 8. Attila Altay Yavuz, Peng Ning, "Self-Sustaining, Efficient and Forward-Secure Cryptographic Schemes for Unattended wireless sensor networks," Ad hoc Networks, Vol. 10, Apr 2012, pp. 1204-1220. 9. http://en.wikipedia.org/wiki/Overhead_(computing) 10. http://en.wikipedia.org/wiki/Digital_signature 11. D. Ma, Practical forward secure sequential aggregate signatures, in: Proceedings of the 3rd ACM symposium on Information, Computer and Communications Security (ASIACCS '08), ACM, NY, USA, 2008, pp. 341-352. 12. D. Boneh, C. Gentry, B. Lynn, H. Shacham, Aggregate and verifiably encrypted signatures from bilinear maps, in: Proc. of the 22th International Conference on the Theory and Applications of Cryptographic Techniques (EUROCRYPT '03), Springer-Verlag, 2003, pp. 416-432. 	54-57
13.	<p>Authors: A.S.Syed Navaz, S.Gopalakrishnan, R.Meena</p> <p>Paper Title: Anomaly Detections in Internet traffic Using Empirical Measures</p> <p>Abstract: Introducing Internet traffic anomaly detection mechanism based on large deviations results for empirical measures. Using past traffic traces we characterize network traffic during various time-of-day intervals, assuming that it is anomaly-free. Throughout, we compare the two approaches presenting their advantages and disadvantages to identify and classify temporal network anomalies. We also demonstrate how our framework can be used to monitor traffic from multiple network elements in order to identify both spatial and temporal anomalies. We validate our techniques by analyzing real traffic traces with time-stamped anomalies.</p> <p>Keywords: Server, Client, Network, Anomaly Detection</p> <p>References:</p> <ol style="list-style-type: none"> 1. M. Roesch, "Snort—Lightweight intrusion detection for networks," in LISA '99: Proc. 13th USENIX Conf. System Administration, Seattle, WA, Nov. 1999, pp. 229-238. 2. Paxson, "Bro: A system for detecting network intruders in real time," Computer Networks, vol. 31, no. 23-24, pp. 2435-2463, 1999. 3. P. Barford, J. Kline, D. Plonka, and A. Ron, "A signal analysis of network traffic anomalies," in Proc. ACM SIGCOMM Workshop on Internet Measurement, Marseille, France, Nov. 2002, pp. 71-82. 4. R. Lippmann, D. Fried, I. Graf, J. Haines, K. Kendall, D. McClung, D. Weber, S. Webster, D. Wyschogrod, R. Cunningham, and M. Zissman, "Evaluating intrusion detection systems: The 1998 DARPA off-line intrusion detection evaluation," in Proc. DARPA Information Survivability Conf. and Expo., Los Alamitos, CA, Jan. 2000, pp. 12-26. 5. R. Lippmann, J. W. Haines, D. J. Fried, J. Korba, and K. Das, "The 1999 DARPA off-line intrusion detection evaluation," Computer Networks, vol. 34, no. 4, pp. 579-595, 2000. 6. Yegneswaran, J. T. Giffin, P. Barford, and S. Jha, "An architecture for generating semantics-aware signatures," in USENIX Security Symp., Baltimore, MD, Jul. 2005, pp. 97-112. 7. I. Dembo and O. Zeitouni, Large Deviations Techniques and Applications, 2nd ed. New York: Springer-Verlag, 1998. 8. W. Hoeffding, "Asymptotically optimal tests for multinomial distributions," Ann. Math. Statist. vol. 36, pp. 369-401, 1965. 9. I. Paschalidis and S. Vassilaras, "On the estimation of buffer overflow probabilities from measurements," IEEE Trans. Inf. Theory, vol. 47, no. 1, pp. 178-191, 2001. 10. I. Paschalidis and S. Vassilaras, "Model-based estimation of buffer overflow probabilities from measurements," in Proc. ACM SIGMETRICS 2001/Performance 2001 Conf., Cambridge, MA, Jun. 16-20, 2001, pp. 154-163. 	58-61

14.	Authors:	H.Lookman Sithic, T.Balasubramanian
	Paper Title:	Survey of Insurance Fraud Detection Using Data Mining Techniques
15.	Abstract:	<p>With an increase in financial accounting fraud in the current economic scenario experienced, financial accounting fraud detection has become an emerging topics of great importance for academics, research and industries. Financial fraud is a deliberate act that is contrary to law, rule or policy with intent to obtain unauthorized financial benefit and intentional misstatements or omission of amounts by deceiving users of financial statements, especially investors and creditors. Data mining techniques are providing great aid in financial accounting fraud detection, since dealing with the large data volumes and complexities of financial data are big challenges for forensic accounting. Financial fraud can be classified into four: bank fraud, insurance fraud, securities and commodities fraud. Fraud is nothing but wrongful or criminal trick planned to result in financial or personal gains. This paper describes the more details on insurance sector related frauds and related solutions. In finance, insurance sector is doing important role and also it is unavoidable sector of every human being.</p> <p>Keywords: Insurance, Data mining, Hard fraud, Soft fraud, Financial fraud.</p> <p>References:</p> <ol style="list-style-type: none"> 1. M.K.Das Law officer, the New india Assurance Co.Ltd., Published in The Insurance Times , November , 2008. 2. Anuj Sharma, Prabin Kumar Panigrahi "A Review of Financial Accounting Fraud Detection based on Data Mining Techniques " international journal of computer applications , volume 39-No.1, February 2012. 3. Turban, E., Aronson, J.E., Liang, T.P., & Sharda, R. (2007). Decision Support and Business Intelligence Systems, Eighth edition, Pearson Education, 2007. 4. Zhang,D., & Zhou, L.(2004). Discovering golden nugget: data mining in financial application, IEEE Transactions on systems, Man and Cybernetics 34(4)(2004) Nov. 5. Ahmed ,S.R.(2004). Applications of data mining in retail business, international conference on information Technology: coding and computing 2 (2) (2004) 455-459. 6. Yamanishi, K., Takeuchi, J.,Williams, G., & Milne,P.(2004). On-line unsupervised outlier detection using finite mixtures with discounting learning algorithms, Data Mining and Knowledge Discovery 8(3) (2004) 373-421. 7. Han , J., & Kamber, M (2006). Data Mining; Concepts and Techniques, second edition, Morgan Kaufmann Publishers , 2006, pp. 285-464. 8. Eick, S.G., & D.E.(1996). Visualizing corporate data, AT&T Technical Journal 75 (1) (1996) 74-86. 9. Sutapat Thiprungrsri, & Miklos A.Vasarhelyi, Rutgers University.USA. "Cluster Analysis for Anomaly Detection in Accounting Data: An Audit Approach" The International Journal of Digital Accounting Research vol. 11, 2011, pp. 69-84. 10. B.Manjula, S.S.V.N.Sarma, Dr.A.Govardhan & R.Lakshman Naik "DFFS: Detecting Fraud in Finance Sector "International Journal of Advanced Engineering Sciences and Technologies. Vol No.9, issue No. 2, 178-182. 11. Han J. and Kamber K., Data mining : Concepts and Techniques, San Fracisco: morgan Kaufmann Publishers , 2001.
	62-65	
Authors:	Nazrul H. ADNAN, Khairunizam WAN, Shariman AB, Juliana A. Abu Bakar, Azri A. AZIZ	
Paper Title:	PCA-based Finger Movement and Grasping Classification using Data Glove "Glove MAP"	
	Abstract:	<p>Nowadays, fingers movement and hand gestures can be used as main activities in translating by naturally and convenient way to the human computer interaction. The purpose of this paper is to analyze in depth the thumb, index and middle fingers on the hand grasping movement against an object. The classification of the fingers activities is analyzed using the statistical analysis method. Principal Component Analysis (PCA) is one of the methods that able to reduce the dimensional dataset of hand motion as well as measure the capacity of the fingers movement. The fingers movement is estimated from the bending representative of proximal and intermediate phalanges of thumb, index and middle fingers. The effectiveness of the propose assessment analysis were shown through the experiments of three fingers motions. Preliminary results of this experiment showed that the use of the first and second principal components can allow distinguishing between three fingers grasping movements.</p> <p>Keywords: finger movement; finger activities; hand grasping; Human Computer Interaction; Principle Component Analysis (PCA)</p> <p>References:</p> <ol style="list-style-type: none"> 1. S. Cobos, M. Ferre, M. A. Sánchez-Urán, J. Ortego and R. Aracil,"Human hand descriptions and gesture recognition for object manipulation",Computer Methods in Biomechanics and Biomedical Engineering, Vol. 13, No. 3, pp. 305 - 317. 2. Y. Endo, S. Kanai, T. Kishinami, N. Miyata, M. Kouchi, and M. Mochimaru, "A computer-aided ergonomic assessment and productdesign system using digital hands", Digital Human Modeling, HCII 2007, V.G. Duffy (Ed.): LNCS 4561, pp. 833-842.2007. 3. M. Santello, M. Flanders, and J. F. Soechting, "Postural HandSynergies for Tool Use",The Journal of Neuroscience,December 1, 18(23):10105–10115,1998. 4. Vo Dinh Minh Nhat, and SungYoung Lee, "Two-dimensional Weighted PCA algorithm for Face Recognition," IEEE International Symposium on Computational Intelligence in Robotics and Automation, pp 219-223,2005. 5. L. Sirovich and M. Kirby,"Low-Dimensional Procedure for Characterization of Human Faces", J. Optical Soc. Am., vol. 4, pp. 519-524,1987. 6. M. Kirby and L. Sirovich, "Application of the KL Procedure for the Characterization ofHuman Faces", IEEE Trans. Pattern Analysis and Machine Intelligence, vol. 12,Ino. 1, pp. 103-108,1990. 7. M. Turk and A. Pentland,"Eigenfaces for Recognition", J. Cognitive Neuroscience, vol. 3, no. 1, pp. 71-86,1991. 8. A. Pentland,"Looking at People: Sensing for Ubiquitous and Wearable Computing", IEEE Trans. Pattern Analysis and Machine Intelligence, vol. 22, no. 1, pp. 107-119,2000. 9. M.A. Grudin,"On Internal Representations in Face Recognition Systems", Pattern Recognition, vol. 33, no. 7, pp. 1161-1177,2000. 10. G.W. Cottrell and M.K. Fleming,"Face Recognition Using Unsupervised Feature Extraction," Proc. Int'l Neural Network Conf., pp. 322-325,1990. 11. D. Valentin, H. Abdi, A.J. O'Toole, and G.W. Cottrell,"Connectionist Models offace Processing: a Survey", Pattern Recognition, vol. 27, no. 9, pp. 1209-1230,1994. 12. J. H. Ahroni, E. J. Boyko, R. Forsberg,"Reliability of F-Scan In-Shoe Measurements of Plantar",Pressure in Foot and Ankle International, 9, 10 pp. 668-673, October 1998. 13. Laurent Vigouroux, Jérémy Rossi, MatthieuFoissac, Laurent Grélot, Eric Berton,"Finger force sharing during an adapted power grip task", in Neuroscience Letters, 504: 290– 294.2011.
66-71		

14. Gregory P. Slota, Mark L. Latash, Vladimir M. Zatsiorsky, "Grip forces during object manipulation: experiment, mathematical model, and validation", in *Exp Brain Res* 213:125–139, 2011.
15. S. Cobos, M. Ferre, M.A. Sánchez-Urán, J. Ortego and C. Peña, "Efficient Human Hand Kinematics for manipulation Task", *IEEE/RJS International conference on intelligent Robots and Systems*, pp. 2246 – 2250, 2008.
16. T. E. Jerde, J. F. Soechting, and M. Flanders, "Biological constraints simplify the recognition of hand Shapes", *IEEE Trans. Biomed. Eng.*, vol. 50, pp. 265–269, 2003.
17. Ramana Vinjamuri, Mingui Sun, Douglas Weber, Wei Wang, Donald Crammond, Zhi-Hong Mao, "Quantizing and Characterizing the Variance of Hand Postures in a Novel Transformation Task", 31st Annual International Conference, pp. 5312-5315, 2009.
18. Salvador Cobos, Manuel Ferre, Rafael Aracil, "Simplified Human Hand Models based on Grasping Analysis", *International Conference on Intelligent Robots and Systems*, pp. 610-615, 2012.
19. Information on <http://www.yalemedicalgroup.org/stw/Page.asp?PageID=STW023547>
20. Saggio G., Bocchetti S., Pinto C.A., Orenco G, "Wireless DataGlove System developed for HMI. ISABEL", 3rd International Symposium on Applied Sciences in Biomedical and Communication Technologies, Rome, Italy, November 7-10, 2010.
21. Oz, C., Leu, M.C., "American Sign Language word recognition with a sensory glove using artificial neural networks", *Engineering Applications of Artificial Intelligence* 24, 1204–1213, 2011.
22. R. Valavi and H. Ghasseman, "A fusion Approach of Multi-Sensor Remote Sensing Data Based on Retina Model", *Proceedings of 12th Iranian Conference on Electric Engineering*, 2004.
23. Information on http://en.wikipedia.org/wiki/Eigenvalues_and_Eigenvectors
24. Yu Kinoshita, Daisuke Takeda, Akinori Sasaki, Hiroshi Hashimoto, Chiharu Ishii, "Archive and Instruction of Hand Motion: Analysis and Evaluation of Hand Motion", *IEEE*, pp. 3030-3035, 2006.
25. Simon Haykin, *Neural Networks and Learning Machine*. Pearson, 2009.
26. Information on <http://arduino.cc/en/Main/arduinoBoardUno>
27. Nazrul H. ADNAN, Khairunizam WAN, Shahrman AB, SKZa'ba, Shafriza Nisha BASAH, Zuradzman M. Razlan, HazryDesa, M. Nasir Ayob, Rudzuan M. Nor and MohdAzri Abd Aziz, "Measurement of the Flexible Bending Force of the Index and Middle Fingers for Virtual Interaction", *International Symposium on Robotics and Intelligent Sensors 2012 (IRIS 2012)*, *Procedia Engineering* 41, 388 – 394, 2012.
28. Solomon Raju Kota, J.L. Raheja, Ashutosh Gupta, Archana Rathi and Shashikant Sharma, "Principal Component Analysis for Gesture Recognition using SystemC", *International Conference on Advances in Recent Technologies in Communication and Computing*, pp 732 – 737, 2009.
29. Information on <http://blog.explainmydata.com/2012/07/should-you-apply-pca-to-your-data.html>
30. [should-you-apply-pca-to-your-data.html](http://blog.explainmydata.com/2012/07/should-you-apply-pca-to-your-data.html)

Authors:	Kiran Kumar Kommineni, Adimulam Yesu Babu
Paper Title:	A Cost-Benefit Model for an Enterprise Information Security

Abstract: A Cost-Benefit model for an enterprise information security is presented in this paper. Economical analysis of information security investments that enterprises can use as guidance when applying the recommended risk mitigation plans are developed. An enterprises information security risk management associated with economical metrics. An economical analytical model is presented that enables the assessment of the necessary investment in the recommended information security. This model would be useful for both information security professionals and researchers in assessing the cost of the security measures versus the benefit of these measures in reducing the identified information security challenges.

Keywords: Cost Benefit Model; Enterprise; Information Security; Risk management.

References:

16.	<ol style="list-style-type: none"> 1. Shuzhen Wang., Zonghua Zhang., Youki Kadobayashi "Exploring attack graph for cost-benefit security hardening: A probabilistic approach" <i>Computers & Security</i>, Volume 32, February 2013, pp 158–169. 2. Romain Jallon., Daniel Imbeau., Nathalie de Marcellis-Warin "Development of an indirect-cost calculation model suitable for workplace use" <i>Journal of Safety Research</i>, Volume 42, Issue 3, June 2011, pp 149–164 3. Feng-Ming Tsai., Chi-Ming Huang "Cost-Benefit Analysis of Implementing RFID System in Port of Kaohsiung" <i>Procedia- Social and Behavioral Sciences</i>, Volume 57, October 2012, pp 40 -46. 4. Tung Bui and Taracad R. Sivasankaran "Cost-effectiveness modeling for a decision support system in computer security" <i>Computers & Security</i>, Volume 6, Issue 2, April 1987, pp 139–151 5. Matthew L. Saxton., Charles M. Naumer., Karen E. Fisher "Information services: Outcomes assessment, benefit–cost analysis, and policy issues" <i>Government Information Quarterly</i>, Volume 24, Issue 1, 2007, pp 186–215 6. Rok Bojanc., Borka Jerman-Blažič., Metka Tekavčič "Managing the investment in information security technology by use of a quantitative modeling" <i>Information Processing & Management</i>, Volume 48, Issue 6, Novr 2012, pp 1031–1052 7. Carlos Blanco., Joaquín Lasheras., Eduardo Fernández-Medina., Rafael Valencia-García., Ambrosio Toval "Basis for an integrated security ontology according to a systematic review of existing proposals" <i>Computer Standards & Interfaces</i>, Vol. 33, Issue 4, 2011, pp 372–388 8. C. Ryu., R. Sharman., H.R. Rao., S. Upadhyaya "Security protection design for deception and real system regimes: A model and analysis" <i>European Journal of Operational Research</i>, Volume 201, Issue 2, March 2010, pp 545–556. 9. Michael Workman., William H. Bommer., Detmar Straub "Security lapses and the omission of information security measures: A threat control model and empirical test" <i>Computers in Human Behavior</i>, Volume 24, Issue 6, September 2008, pp 2799–2816 	72-76
-----	--	-------

Authors:	Lakhwinder kaur, Tejinder Thind
Paper Title:	Lost of Pixel Recovery in Colored Images Using Neural Network

Abstract: As we know pixels are lost in colored images due to misfocus of devices, damaged devices, environmental condition and noise. So it is better to have good algorithm to get good quality of image even after denoising that using some algorithm. Many researchers are doing work in this field to recover pixel lost in given RGB image. We are going to present a noble approach for pixel recovery using neural networks to get better result as we know mean and median filter sometimes did not work well with images. Neural networks works on hidden number of layers in that so we use better number of hidden layers to find pixel to its most matching intensity.

Keywords: Colored images, Neural Network, pixel recovery

References:

1. Yazeed A. Al-Sbou *Artificial neural network evaluation as an image denoising tool* 2012 IDOSI Publications
2. Charu Khare and Kapil Nagwanshi *Image restoration with non filter* vol.39 February 2012

3.	Kuo-Chang Liu Fragile water marking for color images using thersholding technique world academy of science, engineering and technology 68, 2012	
4.	Irana Gladkova ,Michael Grossberg,George Bonev and Fazel Shahriar A multi-band statistical restoration of the aqua modis 1.6 micro band proc.spie,vol.8048,p.804819,2011	
5.	Elhanan Elboher and Michael Werman Recovering color and details of clipped image region	
6.	Jia-Guu Leu Image smoothing based on pixel grouping 1995 IEEE	
7.	A. H. Taherinia, M. Fotouhi and M. Jamzad "A New Watermarking Attack Using Long-Range Correlation Image Restoration	
8.	E. Ardizzone H. Dindo G. Mazzola Texture Synthesis for Digital Restoration in the Bit-Plane Representation	
9.	Irina Gladkonva, Michael D.Grossberg, Fazlul Shahriar, George Bonev and Peter Romanov Quantitative restoration for modis 6 on aqua IEEE june 2012	

18.	Authors:	Saiful Islam, Majidul Ahmed	80-83
	Paper Title:	A Study on Edge Detection Techniques for Natural Image Segmentation	
	<p>Abstract: Natural image segmentation is one of the fundamental problems in image processing. Statistics of 'natural images' provides useful priors for solving under-constrained problems in Computer Vision. Image segmentation is the process of partitioning/subdividing an image into multiple meaningful regions or sets of pixels with respect to a particular application. Image segmentation is a critical and essential component of image analysis system. In literature, there are many image segmentation techniques. One of the most important techniques is Edge detection techniques for natural image segmentation. Edge detection is a fundamental tool for image segmentation. Edge detection methods transform original images into edge images benefits from the changes of grey tones in the image. In literature, there are many Edge detection techniques for image segmentation. In this paper, we used four Edge detection techniques for natural image segmentation and they are Roberts Edge detection, Sobel Edge detection, Prewitt Edge detection, and LoG Edge detection.</p> <p>Keywords: Edge Detection Techniques, Image Segmentation, MATLAB</p> <p>References:</p> <ol style="list-style-type: none"> 1. A. K. Jain, "Fundamentals of digital Image Processing", Englewood Cliff, N.J.: Prentice Hall, 1989. 2. R. C. Gonzalez and R. E. Woods. "Digital Image Processing". 2nd ed. Prentice Hall, 2002. 3. S. K. Pal and N. R. Pal, "A Review on Image Segmentation Techniques", Pattern Recognition, Vol. 26, No. 9, pp. 1277-1294, 1993. 4. Abeokuta, Nigeria, "A Descriptive Algorithm for Sobel Image Edge Detection" Proceedings of Informing Science & IT Education Conference (InSITE) 2009. 5. Senthilkumar. N & R. Rajesh (2009) "Edge Detection Techniques for Image Segmentation –A Survey of Soft Computing Approaches", International Journal of Recent Trends in Engineering. 6. T. Carron and P. Lambert, "Color edge detector using jointly Hue, Saturation and Intensity," in Proc. IEEE International Conference on Image Processing, pp. 977-981, October 1994. 7. Punam Thakare (2011) "A Study of Image Segmentation and Edge Detection Techniques", International Journal on Computer Science and Engineering. 8. Guangyu, L & Rensheng, C 2008, 'A SIMPLE AND EFFICIENT EDGE DETECTION ALGORITHM', paper presented at the Computer Science and Computational Technology, 2008. ISCSCT '08. 9. A. Y. Yang, J. Wright, S. S. Sastry, and Y. Ma, "Unsupervised segmentation of natural images via lossy data compression," CVIU, vol. 110, no. 2, pp. 212–225, May 2008. 10. S.Lakshmi,Dr. V .Sankaranarayanan," A study of Edge Detection for Segmentation Computing Approaches", IJCA special Issue on "Computer Aided Soft Computing Techniques for imaging and Biomedical Applications"CASCT, 20. 11. Rafael C. Gonzalez, Richard E. Woods & Steven L. Eddins (2004) Digital Image Processing Using MATLAB, Pearson Education Ptd. Ltd, Singapore. 12. Raman Maini and Himanshu Aggarwal, "Study and Comparison of Various Image Edge Detection Techniques", International Journal of Image Processing (IJIP), Volume 3 pp-1-12, 2010. 		

19.	Authors:	Parameshachari B D, K M Sunjiv Soyjaudah, Sumithra Devi K A	84-87
	Paper Title:	Image Quality Assessment for Partial Encryption Using Modified Cyclic Bit Manipulation	
	<p>Abstract: Measurement of image quality is important for many image processing applications. Image quality assessment is closely related to image similarity assessment in which quality is based on the differences (or similarity) between a degraded image and the original, unmodified image. There are two ways to measure image quality by subjective or objective assessment. Subjective evaluations are expensive and time-consuming. It is impossible to implement them into automatic real-time systems. Objective evaluations are automatic and mathematical defined algorithm. Subjective measurements can be used to validate the usefulness of objective measurements. Therefore objective methods have attracted more attentions in recent years. Well-known objective evaluation algorithms for measuring image quality include mean squared error (MSE), peak signal-to-noise ratio (PSNR), and structural similarity (SSIM). MSE & PSNR are very simple and easy to use. In this paper Image Quality Assessment for Partial Encryption Using Modified Cyclic Bit Manipulation. Proposed Partial Encryption algorithm based on the amount of encryption needed (i.e. percentage of encryption). Various objective evaluation algorithms for measuring image quality like Mean Squared Error (MSE), Peak Signal-To-Noise Ratio (PSNR) and Structural Similarity (SSIM) etc. will be studied and their results will be compared.</p> <p>Keywords: Image Quality, MSE, PSNR,</p> <p>References:</p> <ol style="list-style-type: none"> 1. Z. Wang, A. C. Bovik, Mean squared error: love it or leave it? – A new look at signal fidelity measures, IEEE Signal Processing Magazine 26 (2009) 98–117. 2. Z. Wang and A. C. Bovik, A universal image quality index, IEEE Signal Processing Letters 9 (2002) 81–84. 3. Z. Wang and A. C. Bovik, Image quality assessment: From error visibility to structural similarity, IEEE Transaction on Image Processing 13 (2004) 600–612. 4. G.-H. Chen, C.-L. Yang, and S.-L. Xie, Edge-based structural similarity for image quality assessment, in: Proceedings of International Conference on Acoustics, Speech, and Signal Processing, Toulouse, France, 2006, pp. 14–19. 5. G.-H. Chen, C.-L. Yang, and S.-L. Xie, Gradient-based structural similarity for image quality assessment, in: Proceedings of International 		

Conference on Image Processing, Atlanta, GA, 2006, pp. 2929–2932.

6. Z. Wang, E. P. Simoncelli, and A. C. Bovik, Multiscale structural similarity for image quality assessment, in: Proceedings of IEEE Asilomar Conference on Signals, Systems, and Computers, Pacific Grove, CA, 2003, pp. 1398–1402
7. F. Wei, X. Gu, and Y. Wang, Image quality assessment using edge and contrast similarity, in: Proceedings of IEEE International Joint Conference on Neural Networks, Hong Kong, China, 2008, pp. 852–855.
8. G. Zhai, W. Zhang, X. Yang, and Y. Xu, Image quality assessment metrics based on multi-scale edge presentation, in: Proceedings of IEEE Workshop Signal Processing System Design and Implementation, Athens, Greece, 2005, pp. 331–336.
9. C.-L. Yang, W.-R. Gao, and L.-M. Po, Discrete wavelet transform-based structural similarity for image quality assessment, in: Proceedings of IEEE International Conference on Image Processing, San Diego, CA, 2008, pp. 377–380.
10. A. Shnayderman, A. Gusev, and A. M. Eskicioglu, An SVD-based grayscale image quality measure for local and global assessment, IEEE Transaction on Image Processing 15 (2006) 422–429.
11. H.-S. Han, D.-O Kim, and R.-H. Park, Structural information-based image quality assessment using LU factorization, IEEE Transaction on Consumer Electronics 55 (2009) 165–171.
12. D.-O Kim and R.-H. Park, New image quality metric using the Harris response, IEEE Signal Processing Letters 16 (2009) 616–619.
13. D.-O Kim and R.-H. Park, Joint feature-based visual quality assessment, Electronics Letters 43 (2007) 1134–1135.
14. L. Cui and A. R. Allen, An image quality metric based on corner, edge and symmetry maps, in: Proceedings of British Machine Vision Conference, Leeds, UK, 2008.
15. R. Ferzli and L. J. Karam, A no-reference objective image sharpness metric based on just-noticeable blur and probability summation, in: Proceedings of International Conference on Image Processing, San Antonio, TX, 2007, pp. 445–448.
16. Z. Wang, H. R. Sheikh, and A. C. Bovik, No-reference perceptual quality assessment of JPEG compressed images, in: Proceedings of International Conference on Image Processing, Rochester, NY, 2002, pp. 477–480.
17. N. Damera-Venkata, T. Kite, W. Geisler, B. Evans, and A. C. Bovik, Image quality assessment based on a degradation model, IEEE Transaction on Image Processing 9 (2000) 636–650
18. A. B. Watson, DCTune: A technique for visual optimization of DCT quantization matrices for individual images, in: Digest of Technical Papers of Society for Information Display, Seattle, WA, 1993, pp. 946–949.
19. ITU-R Recommendation J.144, Objective perceptual video quality measurement techniques for digital cable television in the presence of a full reference, International Telecommunication Union, 2004.
20. D. M. Chandler and S. S. Hemami, VSNR: A wavelet-based visual signal-to-noise ratio for natural images, IEEE Trans. Image Processing 16 (2007) 2284–2298.
21. Z. Liu and R. Laganiere, On the use of phase congruency to evaluate image similarity, in: Proceedings of International Conference on Acoustics, Speech, Signal Processing, Toulouse, France, 2006, pp. 937–940.
22. G. Zhai, W. Zhang, Y. Xu, and W. Lin, LGPS: Phase based image quality assessment metric, in: Proceedings of IEEE Workshop Signal Processing Systems, Shanghai, China, 2007, pp. 605–609.
23. P. Skurowski and A. Gruca, Image quality assessment using phase spectrum correlation, Lecture Notes in Computer Science, Computer Vision and Graphics, Eds. G. Goos et al., Springer-Verlag Berlin Heidelberg, (2008) 80–89.
24. X. Feng, T. Liu, D. Yang, and Y. Wang, Saliency based objective quality assessment of decoded video affected by packet losses, in: Proceedings of International Conference on Image Processing, San Diego, CA, 2008, pp. 2560–2563.
25. Z. You, A. Perkis, M. M. Hannuksela, and M. Gabbouj, Perceptual quality assessment based on visual attention analysis, in: Proceedings of ACM International Conference on Multimedia, Beijing, China, 2009, pp. 561–564
26. H. R. Sheikh, A. C. Bovik, and G. de Veciana, An information fidelity criterion for image quality assessment using natural scene statistics, IEEE Transaction on Image Processing 14 (2005) 2117–2128.
27. H. R. Sheikh and A. C. Bovik, Image information and visual quality, IEEE Transaction on Image Processing 15 (2006) 430–444.
28. Parameshachari B D, K M Sunjiv Soyjaudah, Chaitanyakumar M V, A Study on Different Techniques for Security of an Image, International Journal of Recent Technology and Engineering™ (IJRTE), Volume-1, Issue-6, Jan 2013.
29. Somdip Dey, “SD-EI: A Cryptographic Technique To Encrypt Images”, Proceedings of “The International Conference on Cyber Security, Cyber Warfare and Digital Forensic (CyberSec 2012)”, held at Kuala Lumpur, Malaysia, 2012, pp. 28-32
30. Parameshachari B D and Dr. K M S Soyjaudah “Analysis and Comparison of Fully Layered Image Encryption Techniques and Partial Image Encryption Techniques” Proceedings of ICIP 2012, CCIS 292, pp. 599–604, 2012. © Springer-Verlag Berlin Heidelberg 2012.
31. Parameshachari B D and Dr. K M S Soyjaudah “A New Approach to Partial Image Encryption” published at Proceedings of ICAdC, AISC 174, pp. 1005–1010. © Springer India 2013.

Authors: Rajashekarappa, K M Sunjiv Soyjaudah, Sumithra Devi K A

Paper Title: Study on Cryptanalysis of the Tiny Encryption Algorithm

Abstract: In this paper we present the Study on a Tiny Encryption Algorithm. There is a requirement to specify cryptographic strength in an objective manner rather than describing it using subjective descriptors such as weak, strong, acceptable etc. Such metrics are essential for describing the characteristics of cryptographic products and technologies. Towards this objective, we use two metrics called the Strict Plaintext Avalanche Criterion (SPAC) and the Strict Key Avalanche Criterion (SKAC) mentioned in our study that the strength of popular ciphers such as DES and TEA. A related issue of significance in the context of cryptographic applications is the quality of random number generators which need to pass certain tests. In this Paper, we expose DES and TEA to some of the standard random number generator tests.

Keywords: Data Encryption Standard, Tiny Encryption Algorithm.

References:

1. Wheeler D., and R. Needham. TEA, a Tiny Encryption Algorithm, Proceedings of the Second International Workshop on Fast Software Encryption, Springer-Verlag, 1995, pp. 97-110.
2. J. Kelsey, B. Schneier, D. Wagner, “Key-Schedule Cryptoanalysis of IDEA, G-DES, GOST, SAFER, and Triple-DES,” CRYPTO 1996 (N. Koblitz, ed.), vol. 1109 of LNCS, pp. 237–251, Springer-Verlag, 1996.
3. William Stallings. Cryptography and Network Security Principles and Practices, Third Edition, Pearson Education Inc., 2003.
4. D. Wheeler and R. Needham, TEA Extensions, October 1997.
5. J. Kelsey, B. Schneier and D. Wagner, Related-Key Cryptanalysis of 3-WAY, Biham-DES, CAST, DES-X, NewDES, RC2, and TEA, In Information and Communications Security-Proceedings of ICICS 1997, Lecture Notes in Computer Science 1334, Springer-Verlag, 1997.
6. Y. Ko, S. Hong, W. Lee, S. Lee, J.-S. Kang, “Related-Key Differential Attacks on 27 Rounds of XTEA and Full-Round GOST,” FSE 2004 (B.K. Roy, W. Meier, eds.), vol. 3017 of LNCS, pp. 299–316, Springer-Verlag, 2004.
7. E. Lee, D. Hong, D. Chang, S. Hong, J. Lim, “A Weak Key Class of XTEA for a Related-Key Rectangle Attack,” VIETCRYPT 2006 (P.Q. Nguyen, ed.), vol. 4341 of LNCS, pp. 286–297, Springer-Verlag, 2006.
8. J. Lu, “Related-key rectangle attack on 36 rounds of the XTEA block cipher,” International Journal of Information Security, vol. 8(1), pp. 1–11, Springer-Verlag, 2009, also available at <http://jqiang.googlepages.com/IJIS8.pdf>.
9. M. D. Moon, K. Hwang, W. Lee, S. Lee, J. Lim, “Impossible Differential Cryptanalysis of Reduced Round XTEA and TEA,” FSE 2002 (J. Daemen, V. Rijmen, eds.), vol. 2365 of LNCS, pp. 49–60, Springer-Verlag, 2002.

	<ol style="list-style-type: none"> 10. R. M. Needham, D.J. Wheeler, "Correction to xtea," technical report, Computer Laboratory, University of Cambridge, October 1998, available at http://www.movable-type.co.uk/scripts/xxtea.pdf. 11. M.-J. Saarinen, "Cryptanalysis of Block TEA," unpublished manuscript, October 1998, available at http://groups.google.com/group/sci.crypt.research/msg/f52a533d1e2fa15e. 12. M. Steil, "17 Mistakes Microsoft Made in the Xbox Security System," Chaos Communication Congress 2005, available at http://events.ccc.de/congress/2005/fahrplan/events/559.en.html. 13. D.J. Wheeler, R.M. Needham, "TEA, a Tiny Encryption Algorithm," FSE 1994 (B. Preneel, ed.), vol. 1008 of LNCS, pp. 363–366, Springer-Verlag, 1994. 14. J.-P. Kaps, "Chai-Tea, Cryptographic Hardware Implementations of xTEA," INDOCRYPT 2008 (D.R. Chowdhury, V. Rijmen, A. Das, eds.), vol. 5365 of LNCS, pp. 363–375, Springer-Verlag, 2008. 15. Norman D., Jorstad., and Landgrave T. Smith, Jr. Cryptographic Algorithm Metrics, Technical Report, Institute for Defense Analyses, Science and Technology Division, Jan 1997. 16. Bruce Schneier. Applied Cryptography, 2nd Edition, John Wiley & Sons, 1996. 17. Rajashekarappa, Sunjiv Soyjaudah, K. M., "Overview of Differential Cryptanalysis of Hash Functions using SMART Copyback for Data" published at International Journal of Computer Science and Technology(IJCSST), Vol. 4, Issue 1, Jan-March 2013, pp 42-45. 18. Behrouz A. Forouzan, (2006)"Cryptography and Network Security", Firstedition, McGraw- Hill. 19. Atul Kahate, " Cryptography and Network Security", TMH, 2003. 20. A.Zugaj, K. Górski, Z. Kotulski, A. Paszkiewicz, J. Szczepański,(2000) "New constructions in linear cryptanalysis of block ciphers", ACS'2000, October. 21. Rajashekarappa and Dr. K M S Soyjaudah "Heuristic Search Procedures for Cryptanalysis and Development of Enhanced Cryptographic Techniques" Published at International Journal of Modern Engineering Research (IJMER), May 2012, Vol.2, Issue.3, pp-949-954. 					
21.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Authors:</td> <td>Chetna M Vyas, Darshana R Bhatt</td> </tr> <tr> <td>Paper Title:</td> <td>Destructive Strength Properties of Recycled Coarse Aggregate</td> </tr> </table> <p>Abstract: Due to a critical shortage of natural aggregate, the availability of demolished concrete for use as recycled coarse aggregate (RCA) is increasing. Use of waste concrete as RCA conserves natural aggregate, reduces the impact on landfills, save energy and can provide cost benefit. Recycled aggregates are the materials for the future. The application of recycled aggregate has been started in many Asian & Western countries for construction projects. Research Paper reports the basic strength properties of recycled coarse aggregate. It also compares these properties with natural aggregates. Basic changes in all aggregate properties were determined. Basic concrete properties like compressive strength, pull out strength are explained here for different combinations of recycled coarse aggregate with natural aggregate. The compressive strength, pull out strength is used to determine the maximum resistance of a concrete to axial loading of the concrete specimens that having different percentage of recycled coarse aggregate replacement. The testing is just carried out after 28 days of casting. The resting specimen was 100mm diameter and 200 mm height for M25 grade concrete. There were total of six batches of concrete mixes, consists of every 20% increment of recycled aggregate replacement from 0% to 100%.</p> <p>Keywords: recycled coarse aggregate (RCA), compressive strength, pull out strength.</p> <p>References:</p> <ol style="list-style-type: none"> 1. V. Ramasamy and Dr, s, Biswas, "Durability properties of Rice Husk Ash Concrete." ICI journal October, – December 2009; p -41-50. 2. Limbachiya M. C., Leelawat T. and Dhir R. K (2000), "Use of recycled concrete aggregate in high-strength concrete, Materials and Structures", November 2000, pp. 574- 580. 3. Tavakoli (1996), "Strength of recycled aggregate concrete made using field demolished concrete as aggregate" ACI journal March-April 1996; p-182-190. 4. Oikonomou,N.D.(2005)"Recycled Concrete Aggregates," Cement & Concrete Composites, Vol. 27, pp315-318. 5. Tavakoli, M. and Soroushian, P. (1996), "Strength of Recycled Aggregate Concrete made using Field Demolished Concrete as Aggregate," ACI Materials Journal, Vol. 93, No.2, pp.182-190. 	Authors:	Chetna M Vyas, Darshana R Bhatt	Paper Title:	Destructive Strength Properties of Recycled Coarse Aggregate	92-94
Authors:	Chetna M Vyas, Darshana R Bhatt					
Paper Title:	Destructive Strength Properties of Recycled Coarse Aggregate					
22.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Authors:</td> <td>Rajpal Singh Bhoopal, Pradeep Kumar Sharma, Ramvir Singh, Sajjan Kumar</td> </tr> <tr> <td>Paper Title:</td> <td>Effective Thermal Conductivity of Polymer Composites Using Local Fractal Techniques</td> </tr> </table> <p>Abstract: The model developed by Springer and Tsai is extended using non-linear volume fraction in place of physical porosity for the effective thermal conductivity of composite materials with the help of local fractal techniques. The expression for non-linear volume fraction is obtained using data available in the literature. Present model is constructed in terms of fiber volume fraction, the fiber-matrix thermal conductivity ratio and the local fractal dimensions. The effective thermal conductivity ratio is evaluated using the model with the approximation of the fractal dimensions. These fractal dimensions [and] are considered to be equal in the absence of information about the arrangement of fibers in the composites. The technique of local fractal dimensions is used to reduce the geometric complexity of the fiber arrangements. Better agreement of predicted effective thermal conductivity values with experimental results is obtained. A comparison with other models is also done and found that our model predict the values of effective thermal conductivity quite well.</p> <p>Keywords: Effective thermal conductivity, local fractal dimension, correction term, composite materials</p> <p>References:</p> <ol style="list-style-type: none"> 1. G. Kalaprasad, P. Pradeep,G. Mathew, C. Pavithran, and S. Thomas, Thermal conductivity and thermal diffusivity analysis of low - density polyethylene composites reinforced with sisal glass and intimately mixed sisal/glass fibers, Composites Science and Technology, vol. 60, pp. 2967-2977, 2000. 2. Y. Xu, D.D.L. Chung, and C. Morz, Thermally conducting aluminum nitride polymer- matrix composites, Composites Part A, vol. 32, pp. 1749-1757, 2001. 3. Y. Agari, and A. Nagai Ueda, Estimation on thermal conductivities of filled polymers, Journal of Applied Polymer Science, vol. 32, pp. 5705-5712, 1993. 4. I. H. Tavman, Thermal and mechanical properties of aluminum powder filled high density polyethylene composites, Journal of Applied Polymer Science, vol. 62(12), pp. 2161-2167, 1996. 5. D. Kumlutas, I.H. Tavman, and M.T. Coban, Thermal conductivity of particle filled polyethylene composite materials, Composites Science and Technology, vol. 63, pp. 113-117, 2003. 	Authors:	Rajpal Singh Bhoopal, Pradeep Kumar Sharma, Ramvir Singh, Sajjan Kumar	Paper Title:	Effective Thermal Conductivity of Polymer Composites Using Local Fractal Techniques	95-100
Authors:	Rajpal Singh Bhoopal, Pradeep Kumar Sharma, Ramvir Singh, Sajjan Kumar					
Paper Title:	Effective Thermal Conductivity of Polymer Composites Using Local Fractal Techniques					

	<ol style="list-style-type: none"> 6. A. Boudenne, L. Ibos, M. Fois, and E. Gehin, Thermophysical properties of polypropylene/aluminum composites, <i>Journal of Applied Polymer Science</i>, vol. 42, pp. 722- 732, 2004. 7. R. Singh, and H. S. Kasana, Computational aspects of effective thermal conductivity of highly porous metal foams, <i>Applied Thermal Engineering</i>, vol. 24, pp. 1841-1849, 2004. 8. H. Serkan, D. Kumlutas, and I. H. Tavman, Effect of particle shape on thermal conductivity of copper reinforced polymer composites, <i>Journal of Reinforced Plastics and Composites</i>, vol. 26, pp. 113-121, 2007. 9. Rajinder Pal, New model for thermal conductivity of particulate composites, <i>Journal of Reinforced Plastics and Composites</i>, vol. 26, pp. 643-651, 2007. 10. Rajinder Pal, On the electrical conductivity of particulate composites, <i>Journal of Composite Materials</i> vol. 41, pp. 2499-2511, 2007. 11. M. Wang, J. H. He, J. Y. Yu, and N. Pan, Lattice Boltzmann modelling of the effective thermal conductivity for fibrous materials, <i>International Journal of Thermal Sciences</i>, vol. 46, pp. 848–855, 2007. 12. M. Wang, J. K. Wang, N. Pan, S. Chen, J. He, Three-dimensional effect on the effective thermal conductivity of porous media, <i>Journal of Physics D: Applied Physics</i>, vol. 40, pp. 260– 265, 2007. 13. M. Wang, J. K. Wang, N. Pan, and S. Chen, Mesoscopic predictions of the effective thermal conductivity of microscale random porous media, <i>Physics Review E</i>, vol. 75, 036702, 2007. 14. M. Wang, N. Pan, J. Wang, and S. Chen, Mesoscopic simulations of phase distribution effects on the effective thermal conductivity of microgranular porous media, <i>Journal of Colloid and Interface Science</i>, vol. 311, pp. 562–570, 2007. 15. M. Wang, J. K. Wang, N. Pan, S. Chen, and J. He, Three-dimensional effect on the effective thermal conductivity of porous media, <i>Journal of Physics D: Applied Physics</i>. vol. 40, pp. 260– 265, 2007. 16. Rajinder Pal, On the Lewis-Nielsen model for thermal/electrical conductivity of composites, <i>Composites Part A</i>, vol. 39, pp. 718-726, 2008. 17. S. Mahjoob, and K. Vafai, A Synthesis of fluid and thermal transport models for metal foam heat exchangers, <i>International Journal Heat Mass Transfer</i>, vol. 51, pp. 3701–3711, 2008. 18. M. Wang, and N. Pan, Modeling and prediction of the effective thermal conductivity of random open-cell porous foams, <i>International Journal of Heat and Mass Transfer</i>, vol. 51, pp. 1325-1331, 2008. 19. M. Wang, and N. Pan, Predictions of effective physical properties of complex multiphase, <i>Materials Science and Engineering: R</i>, vol. 63, pp. 1–30, 2008. 20. R. Singh, and P. Sharma, Effective thermal conductivity of polymer composites, <i>Advanced Engineering Materials</i>, vol. 10, pp.366-370, 2008. 21. Ramvir Singh, P. K. Sharma, R. S. Bhoopal, L. S. Verma, Prediction of effective thermal conductivity of cellular and polymer composites, <i>Indian Journal Pure and Applied Physics</i>, vol. 49, pp. 344-349, 2011. 22. Sajjan Kumar, Rajpal Singh Bhoopal, Pradeep Kumar Sharma, Radhey Shyam Beniwal, Ramvir Singh, Non-linear effect of volume fraction of inclusions on the effective thermal conductivity of composite materials: A modified maxwell model, <i>Open Journal of Composite Materials</i>, vol. 1, pp. 10-18, 2011. 23. Rajpal S. Bhoopal, P. K. Sharma, Sajjan Kumar, Alok Pandey, R.S. Beniwal and Ramvir Singh, Prediction of effective thermal conductivity of polymer composites using artificial neural network approach, <i>Special Topics & Reviews in Porous Media – An International Journal</i>, vol. 3(2), pp. 115-123, 2012. 24. Rajpal S. Bhoopal, Dharmendra Tripathi, Madhusree Kole, T. K. Dey, Ramvir Singh, Experimental and numerical investigations of effective thermal conductivity of low-density polyethylene filled with Ni and NiO particles, <i>Composites: Mechanics, Computations, Applications, An International Journal</i>, vol. 3, pp. 79-93, 2012. 25. T. K. Dey and M. Tripathi, “Thermal properties of silicon powder filled high-density polyethylene composites,” <i>Thermochimica Acta</i>, vol. 502, pp.35-42, 2010. 26. Rajpal Singh Bhoopal, Ramvir Singh, Pradeep Kumar Sharma, Adaptive neuro-fuzzy inference system for prediction of effective thermal conductivity of polymer-matrix composites, <i>Modeling and Numerical Simulation of Material Science</i>, vol. 2, pp. 43-50, 2012. 27. N Ferguen, C Cogné, E Bellenger, M Guessasma and C Pélegrin, A numerical model for predicting effective thermal conductivities of alumina/Al composites, <i>Journal of Composite Materials</i>, DOI: 10.1177/0021998312464081, 2012. 28. B. B. Mandelbrot, “The Fractal Geometry of Nature,” W. H. Freeman, New York, 1983. 29. H. E. Stanley, NATO ASI Series B, Plenum, New York, vol. 133, pp. 85-97, 1985. 30. H. E. Stanley, N. Ostrowsky, “On growth and form. Fractal and Non-fractal Patterns in Physics,” NATO ASI Series E: Applied Science, Martinus Nijhoff, Dordrecht, The Netherlands. No.100, 1986. 31. Feder, “Fractals,” Plenum, New York, 1988. 32. Dehong Xia, Shanshan Guo, Ling Ren, Study of the reconstruction of fractal structure of closed-cell aluminum foam and its thermal conductivity, <i>Journal of Thermal Science</i>, vol. 21, pp. 77-81, 2012 33. A. Majumdar, C. L. Tein, “Fractal network model for contact conductance,” presented at the Joint ASME/AIChE National Heat Transfer Conference, Philadelphia, P A, 1989. 34. J. F. Thovert, F. Wary, M. P. Adler, “Thermal conductivity of random media and regular fractals,” <i>Journal Applied Physics</i>, vol. 68, pp. 3872-3883, 1990. 35. R. Pitchumani, S.C. Yao, “Correlation of thermal conductivities of unidirectional fibrous composites using local fractal techniques,” <i>Journal of Heat Transfer</i>, vol. 113, pp. 788-796, 1991. 36. S.C. Yao, R. Pitchumani, “Fractal based correlation for the evaluation of thermal conductivities of Fibrous composites,” <i>Transport Phenomena in Materials Processing, ASME HTD</i>, vol.146, pp. 55-60, 1990. 37. S. Adrian Sabau, Y. X. Tao, G. Liu, “Effective conductivity for anisotropic granular porous media using fractal concepts,” <i>Proceeding of National Heat Transfer Conference</i>, vol. 11, pp. 121- 128, 1997. 38. B. M. Yu, J.H. Li, “Some fractal characters of porous media,” <i>Fractal</i>, vol. 9, pp. 365-372, 2001. 39. Y. T. Ma, B. M. Yu, D. M. Zhang, “A Self-similarity model for effective thermal conductivity of porous media,” <i>Journal of Physics D: Applied Physics</i>, vol. 36, pp. 2157-2164, 2003. 40. Y. J. Feng, B. M. Yu, M. Q. Zou, “A Generalized model for the effective thermal conductivity of porous media on self-similarity,” <i>Journal of Physics D: Applied Physics</i>, vol. 37, pp. 3030- 3040, 2004. 41. S. Y. Liu, J. W.Zhang, “Fractal approach to measuring soil porosity,” <i>Journal of Southeast University</i>, 27 (1997) 127-130. 42. S. Mingheng, LI Xiaochuan & Y. Chen, “Determination of effective thermal conductivity for polyurethane foam by use of fractal method,” <i>Science in China Series E: Technological Sciences</i>, vol. 49, pp. 468-475, 2006. 43. G.S. Springer and S.W. Tsai, “Thermal conduct ivies of unidirectional materials,” <i>Journal of Composite Materials</i>, vol. 1, pp. 166-173, 1967. 44. T. Lewis and L. Nielsen, “Dynamic mechanical proper-ties of particulate-filled composite,” <i>Journal of Applied Polymer Science</i>, vol. 14, pp. 1449-1471,1970. 45. A. Bhattacharya, V. V. Calmidi and R. L. Mahajan, “Thermoplastic properties of high porosity metal foam,” <i>International Journal of Heat and Mass Transfer</i>, vol. 45, pp. 1017-1031, 2002. 		
23.	Authors:	Jayeshkumar Pitroda, L.B.Zala, F S Umrigar	
	Paper Title:	Durability of concrete with Partial Replacement of Cement by Paper Industry Waste (Hypo Sludge)	
	Abstract:	Durable concrete is one that performs satisfactorily under the exposed environmental condition during its service life span. Concrete requires to little or zero maintenance and normal environment. Main characteristic influencing the durability of concrete is its permeability to the ingress of water. When excess water in concrete	101-104

	<p>evaporates, it leaves voids inside the concrete element creating capillaries which are directly related to the concrete porosity and permeability. By proper selection of ingredients and mix proportioning and following the good construction practices almost impervious concrete can be obtained. The flow of water through concrete is similar to flow through any porous body. The pores in cement paste consist of gel pores and capillary pores. The pores in concrete as a result of incomplete compaction are voids of larger size which give a honeycomb structure leading to concrete of low strength. There is a need for another type of test rather than the absorption test and permeability tests to measure the response of concrete to pressure. This test should measure the rate of absorption of water by capillary suction, "sorptivity" of unsaturated concrete. In this paper, an attempt is made to study the properties of Paper Industry Waste (Hypo Sludge)concrete to check durability. The mix design was carried out for M25 and M40 grade concrete as per IS: 10262-2009.</p> <p>Keywords: durability, capillary suction, sorptivity, water absorption, hypo sludgeconcrete</p> <p>References:</p> <ol style="list-style-type: none"> Atis, C. D. (2003). "Accelerated carbonation and testing of concrete made with fly ash." Construction and Building Materials, Vol. 17, No. 3, pp. 147-152. Bai j., Wild S, Sabir BB (2002) "Sorptivity and strength of air-cured and water cured PC-PFA-MK concrete and the influence of binder composition and carbonation depth". Cement and concrete research 32:1813-1821. Bentz, D., Ehlen, M., Ferraris, C., and Garboczi, E. "Sorptivity-Based Service Life Predictions for Concrete Pavements." 181–193. Caliskan, S. (2006). "Influence of curing conditions on the sorptivity and weight change characteristics of self-compacting concrete." The Arabian Journal for Science and Engineering, 31(1), 169-178. Claisse, P. A. (1997). "Absorption and Sorptivity of Cover Concrete." Journal of Materials in Civil Engineering, 9(3), 105-110. Dias, W. P. S. (2000). "Reduction of concrete sorptivity with age through carbonation." Cement and Concrete Research, 30(8), 1255-1261. eepa A Sinha, Dr.A.K.Verma, Dr.K.B.Prakash (2012) "Sorptivity and waste absorption of steel fibers reinforced ternary blended concrete". International journal: global research analysis (GRA),volume:1,issue:5,oct2012,issn no:2277-8160. Gonen, T. and Yazicioglu, S. (2007). "The influence of compaction pores on sorptivity and carbonation of concrete." Construction and Building Materials, Vol. 21, No. 5, pp. 1040-1045. Güneyisi, E. and Gesog˘lu, M., (2008). "A study on durability properties of high-performance concretes incorporating high replacement levels of slag." Materials and Structures, Vol. 41, No. 3, pp. 479-493. Hall, C. (1977). "Water movement in porous building materials--I.Unsaturated flow theory and its applications." Building and Environment, 12(2), 117-125. Hall, Christopher; Hoff, William D (2012). Water transport in brick, stone and concrete, 2nd edn. London and New York: Taylor and Francis. http://www.routledge.com/books/details/9780415564670/. Philip, John R (1957). "The theory of infiltration: 4. Sorptivity and algebraic infiltration equations". Soil Science 84: 257-264. Sulapha, P., Wong, S. F., and Wee, T. H., and Swaddiwudhipong, S. (2003). "Carbonation of concrete containing mineral admixtures." Journal of Materials in Civil Engineering, Vol. 15, No. 2, pp. 134- 143. Song X.J, Marosszeky M, Brungs M, Munn R. 2005. Durability of fly ash based Geopolymer concrete against sulphuric acid attack 10 DBMC International Conference on Durability of Building Materials and Components, Lyon, France, 17- 20 April. 					
24.	<table border="1"> <tr> <td>Authors:</td> <td>Rushabh A. Shah, Jayeshkumar Pitroda</td> </tr> <tr> <td>Paper Title:</td> <td>Pozzocrete: Modern Material Partially Replaced with Cement in Mortar</td> </tr> </table> <p>Abstract: Pozzocrete (P40, P60 and P100)a processed quality assured fly ash, investigated for its use as a partial replacement for cement in cement mortar (1:3). The utilization of Pozzocrete (P40, P60 and P100) as cement replacement material in mortar or as additive in cement introduces many benefits from economical, technical and environmental points of view. This paper presents the results of the cement mortar of mix proportion 1:3 in which cement is partially replaced with Pozzocrete (P40, P60 and P100) as 0%, 10%, 30%and 50% by weight of cement. Four set of mixture proportions were made. First were control mix (without Pozzocrete (P40, P60 and P100) with regional fine aggregate (sand)) and the other mixes contained Pozzocrete (P40, P60 and P100) obtained from DIRK India Private Limited, nashik, Maharashtra state. The compressive strength has been obtained with partial replacement of Pozzocrete (P40, P60 and P100) with cement. Test results indicate the decreases in the strength properties of mortar with Pozzocrete (P40, P60 and P100) for strength at 28 days as partial replacement with the cement in the cement mortar 1:3. So it can be used in non-structural elements with the low range compressive strength where strength is not required and low cost temporary structure is prepared.</p> <p>Keywords: Pozzocrete (P40, P60 and P100), Partial replacement, Compressive strength, Cement, Fine aggregate, Cost.</p> <p>References:</p> <ol style="list-style-type: none"> C Freeda Christy, D Tensing, (2010), "Effect of Class-F Fly Ash as Partial replacement with Cement and Fine Aggregate in Mortar", International Journal of Engineering & Materials Sciences, Vol 17, April 2010, pp:140-144. IS 1344 - 1968: Code of practice on pozzalona for mortars. Indian standards Institution, New Delhi. IS 269 -1970 Code of Practice far Portland cement. Indian standards Institution, New Delhi. IS 3812 (part- I) 1966 and part -II Indian standard code of practice on mortars. Indian standards Institution, New Delhi. 	Authors:	Rushabh A. Shah, Jayeshkumar Pitroda	Paper Title:	Pozzocrete: Modern Material Partially Replaced with Cement in Mortar	105-108
Authors:	Rushabh A. Shah, Jayeshkumar Pitroda					
Paper Title:	Pozzocrete: Modern Material Partially Replaced with Cement in Mortar					
25.	<table border="1"> <tr> <td>Authors:</td> <td>Pallavi S. Bangare, Ashwini Pote, Sunil L. Bangare, Pooja Kurhekar, Dhanraj Patil</td> </tr> <tr> <td>Paper Title:</td> <td>The Online Home Security System: Ways to Protect Home from Intruders & Thefts</td> </tr> </table> <p>Abstract: Now-a-days security has been a major issue where crime is increasing and everyone wants to take proper measures to prevent intrusions. Existing security systems are more towards providing passive security system, but this project is aimed at developing the security of home against intruders, fire and smoke. The main concern is home monitoring, appliances controlling, SMS notifications, sensors based alert system, door latches management from remote areas. Using this system, one can manage his home safely from remote places. One can see the present view of the home through the assigned site and can control home.</p> <p>Keywords: Home security, intruder, monitoring, controlling, remote.</p>	Authors:	Pallavi S. Bangare, Ashwini Pote, Sunil L. Bangare, Pooja Kurhekar, Dhanraj Patil	Paper Title:	The Online Home Security System: Ways to Protect Home from Intruders & Thefts	109-112
Authors:	Pallavi S. Bangare, Ashwini Pote, Sunil L. Bangare, Pooja Kurhekar, Dhanraj Patil					
Paper Title:	The Online Home Security System: Ways to Protect Home from Intruders & Thefts					

	<p>References:</p> <ol style="list-style-type: none"> 1. Takako Nonaka, Masato Shimano, Yuta Uesugi and Tomohiro. Embedded Server and Client System for Home Appliances on Real-Time Operating Systems. IEEE (2010). Static Analysis Tools For .NET. 2. Home Automation Info Website. [Online]. Available: http://www.homeautomationinfo.com/Drupal/technology_x10 3. http://en.wikipedia.org/wiki/Stepper-motor 4. Learning ASP.NET 3.5 by Jesse Liberty, Dan Hurwitz and Brian MacDonald. [O'Reilly publication] 5. http://www.sarbash.com/ 6. Diomidis D. Spinellis, "The Information Furnace: User-friendly Home Control", SANE-2002, Conference proceedings, pp. 145-174, NLUUG. 7. http://www.electroncomponents.com/Mini-Components/Relays 		
26.	<p>Authors:</p>	<p>B.Santhosh Vino, Dheepak Mohanraj, G.Gurumoorthy</p>	
	<p>Paper Title:</p>	<p>DSP Based Performance Improvement for Horizontal Axis Wind Turbine Generator Model</p>	
	<p>Abstract: This proposed system focus on monitoring and testing of Horizontal axis wind turbine generator model employing parallel computing technique, Multicore CPU and LabVIEW graphical programming language. By using parallel computing techniques the computing time is faster than the sequential approach. The wind turbine generator performance improvement can be done by using DSP multicore controller and by employing parallel computing technique. The method of real time testing is done by Hardware-in-the-loop simulation. The generator output is monitoring using LabVIEW graphical programming language.</p>		
	<p>Keywords: Horizontal axis wind turbine HAWT, Parallel computing, Lab VIEW, Digital Signal Processors DSP.</p>		
	<p>References:</p>		
	<ol style="list-style-type: none"> 1. Julian Munteanu, Antoneta Iuliana Bratcu, Seddik Bacha, Daniel Rye, and Joel Guiraud "Hardware-in-the-Loop-based Simulator for a Class of Variable-speed Wind Energy Conversion Systems: Design and Performance Assessment", IEEE TRANSACTIONS ON ENERGY CONVERSION, VOL. 25, NO. 2, JUNE, 2010 2. Hui Li, Mischa Steurer, K. L. Shi, Steve Woodruff, and Da Zhang," Development of a Unified Design, Test, and Research Platform for Wind Energy Systems Based on Hardware-in-the-Loop Real-Time Simulation", IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, VOL. 53, NO. 4, AUGUST 2006 3. R. Pena, J.C.Clare, G. M. Asher, "Doubly fed induction generator using back to-back PWM converters and its application to variable speed wind-energy generation", IEE Puoc.-Electr. Power Appl., Vol. 143, No 3, May 1996 4. Li Wang, He-Wen Chen, and Dong-Jing Lee, "Implementation of a DSP-Based Power Converter for a Wind Induction Generator", IEEE 2008 5. Cristian Nichita, Dragos Luca, Brayima Dakyo, and Emil Ceanga," Large Band Simulation of the Wind Speed for Real Time Wind Turbine Simulators", IEEE TRANSACTIONS ON ENERGY CONVERSION, VOL. 17, NO. 4, DECEMBER – 2002 6. Ki-Chang Lee, Jeong-Woo Jeon, Don-Ha Hwang, Se-Han Lee, and Yong-Joo Kim, "Development of Antilock Braking Controller Using Hardware In-the-Loop Simulation and Field Test", IEEE - The 30th Annual Conference of the IEEE Industrial Electronics Society, November 2 - 6, 2004 7. B. Rahelo, W. Hofmann, M. Glick," Emulation of the Static and Dynamic Behavior of a Wind-turbine with a DC-Machine Drive", 35th Annual IEEE Power Electronics Specialists Conference – 2004 8. Cristian Nichita, Dragos Luca, Brayima Dakyo, and Emil Ceanga," Large Band Simulation of the Wind Speed for Real Time Wind Turbine Simulators", IEEE TRANSACTIONS ON ENERGY CONVERSION, VOL. 17, NO. 4, DECEMBER – 2002 9. Varin Vongmanee, "Emulator of Wind Turbine Generator Using Dual Inverter Controlled Squirrel Cage Induction Motor" - Varin Vongmanee – PEDS 2009 10. Haroon Ashfaq, S.A. Nahvi and M.S. Jamil Asghar, "A Personal-Computer based Controller for Performance Improvement of Grid-Connected Wound-Rotor Induction Generators", First International Power and Energy Conference, PECon 2006 11. O. BA, D.Depernet, P. Ndiaye and A. Berthon, "Medium power wind mill control for stand-alone energy generation", 2009 12. Feifei Bu, Wenxin Huang, Yuwen Hu, Yunqing Xu, Kai Shi, Qianshuang Wang, " Study and Implementation of A Control Algorithm for Wind Turbine Yaw Control System", 2009 		113-117
27.	<p>Authors:</p>	<p>S.Thangamari, M.S.Jayakumar</p>	
	<p>Paper Title:</p>	<p>Smoothing the Performance of Hybrid System Output Power Using Fuzzy Wavelet Transform</p>	
	<p>Abstract: The battery energy storage system (BESS) is the current typical means of smoothing intermittent wind or solar power generation. In the present study a wind power generation system, PV generation system, and BESS hybrid power generation system were considered. Then, a fuzzy logic and wavelet transform based smoothing control strategy was proposed for instantaneous WP and PV power generations smoothing by on-line regulation of battery output power. The effectiveness of the proposed control strategy was verified using MATLAB/ SIMULINK software.</p>		
	<p>Keywords: wavelet transform, fuzzy control, wind/PV hybrid power system, battery energy storage system, intelligent smoothing Control</p>		
	<p>References:</p>		
	<ol style="list-style-type: none"> 1. Wei Li and Géza Joós, "Comparison of Energy Storage System Technologies and Configurations in a Wind Farm," Power Electronics Specialists Conference, (PESC 2007), pp.1280-1285, Jun. 2007 2. Yanguo Wang, A Study of Directly Driven Wind Power Generation System and Its Controlling Scheme, Master thesis, North China Electric Power University (Beijing), 2009 (in Chinese) 3. Tony Burton, David Sharpe, Nick Jenkins, Ervin Bossanyi, Wind Energy Handbook, John Wiley & Sons, Dec. 2001 4. Xiangjun Li, Jianqiu Li, Liangfei Xu, Minggao Ouyang, Xuebing Han, Languang Lu, Chengtao Lin, "Online management of lithium-ion battery based on time-triggered controller area network for fuel cell hybrid vehicle applications," Journal of Power Sources, Vol. 195, Issue 10, pp. 3338-3343, May 2010 5. Xiangjun Li, Liangfei Xu, Jianfeng Hua, Xinfan Lin, Jianqiu Li, Minggao Ouyang, "Power management strategy for vehicular-applied hybrid fuel cell/battery power system," Journal of Power Sources, Vol. 191, Issue 2, pp. 542-549, Jun. 2009 6. Xiangjun Li, Dong Hui, Xiaokang Lai and Tao Yan, "Power Quality Control in Wind/Fuel Cell/Battery/Hydrogen Electrolyzer Hybrid Micro-grid Power System," Applications and Experiences of Quality Control, Edited by Ognyan Ivanov, Chapter 29, pp.579-594, InTech, Vienna, Austria, Apr. 2011 7. N. Kawakami, Y. Iijima, Y. Sakanaka, M. Fukuhara, K. Ogawa, M. Bando, T. Matsuda, "Development and field experiences of 		118-122

	<p>stabilization system using 34MW NAS batteries for a 51MW wind farm,” IEEE International Symposium on Industrial Electronics (ISIE2010), pp.2371-2376, Bari, Jul. 2010</p>	<p>8. Xiangjun Li, Dong Hui, Li Wu, Xiaokang Lai. “Control Strategy of Battery State of Charge for Wind/Battery Hybrid Power System,” IEEE International Symposium on Industrial Electronics (ISIE2010), pp. 2723-2726, Bari, Jul.2010</p> <p>9. Sercan Teleke, Mesut E. Baran, Alex Q.Huang, Subhashish Bhattacharya, and Loren Anderson, “Control Strategies for Battery Energy Storage for Wind Farm Dispatching,” IEEE Trans. Energy Conversion, Vol. 24, No. 3, pp. 725-732, Sep. 2009</p> <p>10. S. M. Mueyen, Rion Takahashi, Toshiaki Murata, Junji Tamura, “Integration of an Energy Capacitor System with a Variable-Speed Wind Generator,” IEEE Trans. Energy Conversion, Vol. 24, No. 3, Sept. 2009</p> <p>11. S.M. Mueyen, R. Takahashi, M.H. Ali, T. Murata, J. Tamura, “Transient Stability Augmentation of Power System Including Wind Farms by Using ECS,” IEEE Trans. Power Systems, Vol. 23, No. 3, Aug. 2008</p> <p>12. Chad Abbey, Kai Strunz, and Géza Joós, “A Knowledge-Based Approach for Control of Two-Level Energy Storage for Wind Energy Systems,” IEEE Trans. Energy Conversion, Vol. 24, No. 2, pp. 539-547, Jun. 2009</p> <p>13. Caisheng Wang and M. Hashem Nehrir, “Power Management of a Stand-Alone Wind/Photovoltaic/Fuel Cell Energy System,” IEEE Trans. Energy Conversion, Vol. 23, No. 3, pp. 957-967, Sep. 2008</p> <p>14. Md. H. Rahman, S. Yamashiro, Novel Distributed Power Generating System of PV-ECaSS using Solar Energy Estimation, IEEE Trans. Energy Conversion, Vol. 22, No. 2, pp. 358-367, Jun.2007</p> <p>15. Mesut E. Baran, Sercan Teleke, Loren Anderson, Alex Q. Huang, Subhashish Bhattacharya, Stanley Atcity, “STATCOM with Energy Storage for Smoothing Intermittent Wind Farm Power ,” Power and Energy Society General Meeting - Conversion and Delivery of Electrical Energy in the 21st Century, pp.1-6, Jul. 2008</p> <p>16. Abdulkadir.M. Samosir.A.S and Yatim.A.H.M, “Modeling And Simulation Based Approach Of Photovoltaic System In Simulink Model” ARPN Journal of Engineering and Applied Sciences Vol. 7 No. 5, May.2012</p>
	Authors:	Yuvraj Singh Gurjar, Vijay Singh Rathore
	Paper Title:	Rebalancing the IT Equation with Cloud Computing to drive Business Agility
28.	<p>Abstract: Globalized world of the twenty-first century has made the world flat. Radical "nonlinear change" which brings about a different order is becoming more frequent. Furthermore the pace of change is significantly more rapid. Business networks have become more complex and interwoven. In different industries we witness large differences between the ability of firms to sense highly uncertain and unexpected events and swiftly respond by changing businesses and business processes. Technology innovation, long-term public policy shifts and deregulation are destabilizing the business landscape and reshaping the world in which we live. In particular, the Internet as a communication and transaction infrastructure has led (and will lead) to turbulence and uncertainty in the business and consumer markets. To succeed in this competitive and fast-changing world, businesses need to be more agile and responsive, and they need to keep costs to a minimum. Cloud computing addresses all of these points: agility, responsiveness, cost.</p> <p>Keywords: Cloud Computing, Agility, Business Agility, IT Agility, Cost-Agility Equation.</p> <p>References:</p> <ol style="list-style-type: none"> 1. “Private Cloud Means Business: Cost Down and Agility Up”. Available: http://www.emc.com/collateral/emc-perspective/h6870-consulting-cloud-ep.pdf 2. Nikos C. Tsourveloudi, Kimon P. Valavanis, “On the Measurement of Enterprise Agility”, Journal of Intelligent and Robotic Systems, Year 2002 Volume 33 (3) Page 329–342. Available: http://dx.doi.org/10.1023%2FA%3A1015096909316 3. Business Agility. Available: http://en.wikipedia.org/wiki/Business_agility 4. Gartner, “Achieving Agility – Defining Agility in an IT Context”, Available: http://www.gartner.com/DisplayDocument?id=771215&ref=%27g_fromdoc%27 5. Gartner, “Defining, Cultivating and Measuring Enterprise Agility”, Available: http://www.gartner.com/resources/139700/139734/defining_cultivating_and_mea_139734.pdf 6. James Highsmith , Agile Software Development: Why It's Hot!, Available: http://www.informit.com/articles/article.aspx?p=25930 7. “Agile Business: The competitive weapon. Market research study in four business segments (2004)”, Available: http://agility.moosterhout.nl/#post12 8. Tommi Tapanainen, “Information Technology (IT) Managers’ Contribution To IT Agility In Organizations — Views From The Field”, Available: http://www.doria.fi/bitstream/handle/10024/86242/TSEdiss2012Tapanainen.pdf?sequence=1 9. http://www.gartner.com/it/page.jsp?id=707508 10. Cloud Computing. Available: http://en.wikipedia.org/wiki/Cloud_computing 11. M Peter and G Timothy, The NIST Definition of Cloud Computing (draft) (2011). National Institute of Standards and Technology Special Publication, 800 -145 12. Business Agility and the True Economics of Cloud Computing, Available: http://corporate.sify.com/uploads/Business-Agility-and-the-True_Economics-of-Cloud-Computing.pdf 13. Dennis McCafferty, IT Agility Embraced by Top Performing Companies. Available: http://www.cioinsight.com/c/a/Trends/IT-Agility-Embraced-By-TopPerforming-Companies-190875/ 14. Esther Shein, Speed, Agility, Not Cost Reduction, Drive Cloud, Available: http://www.networkcomputing.com/cloud-computing/speed-agility-not-cost-reduction-drive-c/232900258 15. Bernard Golden, Cloud Computing Both More Agile and Less Expensive, Available: http://www.cio.com/article/698840/Cloud_Computing_Both_More_Agile_and_Less_Expensive_ 16. “Cutting through Complexity with Business Agility”, Available: ftp://public.dhe.ibm.com/software/solutions/soa/pdfs/BFW14001USEN.pdf 17. Michael Hugos, IT Agility Drives Business Agility and Business Agility Drives Profits, Available: http://blogs.cio.com/michael_hugos/10426/it_agility_drives_business_agility_and_business_agility_drives_profits 18. Business Agility and the Cloud. Available: http://blogs.msdn.com/cfs-filesystemfile.ashx/_key/communityserver-blogs-components-weblogfiles/00-00-01-40-06/2766.Business-Agility-and-the-Cloud.pdf 19. Dmitry Samovski, Cost Vs Agility As Drivers for Cloud Computing. Available: http://www.somic.org/2009/11/17/costs-vs-agility-as-drivers-for-cloud-computing/ 20. Reaping the Benefits of Business Agility with Cloud Computing – Real World Profiles. Available: http://www.vmwaregrid.com/cio/MARTUNAS/assets/CIO_Reaping_the_Benefits_of_Business_Agility_with_Cloud_Computing-Real-World_Profiles_WP_FINAL.pdf 21. Cloud computing enables business agility. Available: http://www.internap.com/industry-news/cloud-computing-enables-business-agility-report-says/ 22. http://www.internap.com/industry-news/cloud-computing-enables-business-agility-report-says/ 	123-129
29.	Authors:	Udhayakumar P, Saravanan C, Lydia M

	Paper Title: Stand - Alone Wind Energy Supply System Using Permanent Magnet Synchronous Generator
Abstract: Energy demand across the world is increasing and the resources are becoming scarce. The major source of power is from the conventional sources only. Some of the conventional sources of energies like thermal energy is produced from the fossil fuel coal which are depleting and is only limited to 2030. Renewable sources of energies are Solar, Wind, Biomass, etc hold bright prospect for the future. Wind industry has made rapid strides in the recent years. Wind power penetration has increased significantly in many interconnected power systems. Wind farms in remote places can also serve as stand – alone wind energy supply system. In this paper simulation of stand – alone wind energy supply system using permanent magnet synchronous generator is done. <p>Keywords: Permanent Magnet Synchronous Generator, Rectifier, Boost Converter, Voltage Source, PWM Inverter, Lead – Acid Battery.</p> <p>References:</p> <ol style="list-style-type: none"> Muller S, Deicke M and De Doncker R W, 'Doubly fed induction generator systems for wind turbines,' IEEE Industry Applications Magazine, 8 (3), 26–33, 2002 Holdsworth L, Wu X, Ekanayake J B and Jenkins N, 'Comparison of fixed speed and doubly-fed induction wind turbines during power system disturbances,' IEEE Proceedings: Generation, Transmission and Distribution, 150 (3), 343–352, 2003. Akhmatov V, Nielsen A F, Pedersen J K and Nymann O, 'Variable-speed wind turbines with multi-pole synchronous permanent magnet generators. Part 1: modelling in dynamic simulation tools,' Wind Engineering, 27, 531–548, 2003. Ackermann T, 'Wind Power in Power Systems,' John Wiley & Sons, Ltd, Chichester, ISBN 10: 0470855088, 2005 Anson S, Sinclair K and Swezey B, 'Profiles in Renewables Energy,' Case studies of successful utility-sector projects, DOE/NREL Report No. DE-930000081, National Renewable Energy Laboratory, Golden, Colorado, August 1994. Gupta A K, 'Power Generation from Renewables in India,' Ministry of Non-Conventional Energy Sources, New Delhi, India, 1997. 	<p style="text-align: right;">130-135</p>
Authors:	Deepak B. Nagare, Kishor L. More, Nitin S. Tanwar, S.S.Kulkarni, Kalyan C. Gunda
Paper Title:	Dynamic Carpooling Application Development on Android Platform
Abstract: In today's world, there are lots of people commuting from place to place. Example: employees going back home. Students going home from university etc. And lot of times, people will be commuting via car or bike and there is place to take a fellow employee along with him to give a ride. But the problem is there is no easy way to know how many people a person can take and co-ordination is a huge issue that there is no effort by people to help each other by giving a lift and more over this saves the environment in reducing fuel usage, reduces traffic with fewer vehicles etc. The Carpool is an android application which will provide the advanced searching techniques and provide most relevant results for the carpooling in the city. This will be help full in easy way Carpooling reduces the costs involved in repetitive or long distance driving by sharing cars, sharing rental charges, or paying the main car owner. Some countries have introduced high-occupancy vehicle (HOV) lanes to encourage carpooling and use of public transport, to combat rising traffic congestion [1]. <p>Keywords: Car Owner, Ride Seeker, Pickup and Drop-Off points, HOV [high-occupancy vehicle], OV [Origin & Destination]</p> <p>References:</p> <ol style="list-style-type: none"> Shangyao Yan, Chun-Ying Chen, and Yu-Fang Lin, "A Model with a Heuristic Algorithm for Solving the Long-Term Many-to-Many Carpooling Problem", IEEE TRANSACTIONS ON INTELLIGENT TRANSPORTATION SYSTEMS, VOL. 12, NO. 4, DECEMBER 2011 George Dimitrakopoulos, Panagiotis Demestichas, and Vera Koutra. "Intelligent Management Functionality for Improving Transportation Efficiency by Means of The Carpooling Concept", IEEE TRANSACTIONS ON INTELLIGENT TRANSPORTATION SYSTEMS, VOL. 13, NO. 2, JUNE 2012. Gérald Arnould, Djamel Khadraoui, Marcelo Armendáriz, Juan C. Burguillo, Ana Peleteiro," A Transport Based Clearing System for Dynamic Carpooling Business Services" 2011 11th International Conference on ITS Telecommunications. Yunfei Hou, Xu Li, IEEE Member, and Chunming Qiao, IEEE Fellow,TicTac: From Transfer-Incapable Carpooling to Transfer-Allowed Carpooling,Globecom 2012- Ad Hoc and Networking Symposium. . Liu, M. Liu et al "When Transportation Meets Communication: V2P over VANETs," IEEE ICDCS, 2010. S. Abdel-Naby, S. Fante, and P. Giorgini. Auctions Negotiation for Mobile Rideshare Service. In Procs. ICPCA 2007, pages 225{230, 2007. Martin Savelsbergh, Sustainable Passenger Transportation: Dynamic Ride-sharing, TRANSLOG,December 9, Chile. R. Baldacci, V. Maniezzo, and A. Mingozzi, "An exact method for the carpooling problem based on Lagrangian column generation," Oper. Res., vol. 52, no. 3, pp. 422–439, Jun. 2004. Paul Resnick, Associate Professor,University of Michigan, School of Information, SocioTechnical Support for Ride Sharing. G. Giuliano, W. Douglas, D. Levine, and R. Teal, "Impact of high occupancy vehicle lanes on carpooling behavior," Transportation, vol. 17,no. 2, pp. 159–177, Feb. 1990. Gonçalo CORREIA1, José Manuel VIEGAS2,CAR POOLING CLUBS: SOLUTION FOR THE AFFILIATION PROBLEM IN TRADITIONAL/DYNAMIC RIDESHARING SYSTEMS, Advanced OR and AI Methods in Transportation. 	<p style="text-align: right;">136-139</p>
Authors:	M.Mohammed Sha, K.Vivekanandan
Paper Title:	Selection of Web Services Based on Provider's Reputation
Abstract: Web services are being considered an excellent tool to solve distributed computing challenges in business integration. Business-to-business integration has become a critical issue as organizations find a greater need to consistently interact with new partners in a global business environment. Picking a service of an organization from the services having similar properties, capabilities, interfaces, and effects is a difficult task and necessitates the use of an intelligent decision making system. So the quality related aspects are also considered for the selection of a best service. Measuring the QoS of a web services for a customer is not an easy task. Selection based on Non- Functional parameters is always be a wrong choice because of false projection and advertisement by the service providers. Here, the challenge is to check the actual reputation for the service provider. In this paper, we are proposing a method to	<p style="text-align: right;">140-143</p>

	<p>measure the actual reputation of a services provider by considering various reputation measures of few reputed service providers.</p> <p>Keywords: Web Service, Service Provider, QoS , Reputation</p> <p>References:</p> <ol style="list-style-type: none"> Chen, Y.; Liu, Y.; and Zhou, C. 2006. Web service success factors from users behavioral perspective. In Proc. of the 10th Int. Conf. on Computer Supported Cooperative Work in Design, volume 4402 of LNCS, 540–548. Jurca, R., and Faltings, B. 2005. Reputation-based service level agreements for web services. In Proc. of Service Oriented Computing (ICSOC), volume 3826 of LNCS, 396–409. Maximilien, E. M. 2005. Multi agent system for dynamic web service selection In The 1st Workshop on Service-Oriented Computing and Agent-based Eng., 25–29. Yao, W., and Vassileva, J. 2007. A review on trust and reputation for web service selection. In 1st Int. Workshop on Trust and Reputation Management in Massively Dis. Comp. Sys., 22–29. U. S. Manikrao, T.V. Prabhakar, “Dynamic Selection of Web Services with Recommendation System”, in Proceedings International Conference on Next Generation Web Services Practices, August 2005. B. Yu and P. M. Singh, “Distributed Reputation Management for Electronic Commerce”, Computational Intelligence, Volume 18, Issue 4, 2002, pages 535-549. Y. Wang, J. Vassileva. “A Review on Trust and Reputation for Web Service Selection”, in Proceedings of First International Workshop on Trust and Reputation Management in Massively Distributed Computing Systems (TRAM'2007), in conjunction with ICDCS 2007, June 25-29, 2007, Toronto, Canada. J. B. Wu, G. Lv, Trust and reputation evaluation for web services based on user experiences, Journal of Computer Application, Vol. 29, 2009. Z. Malik and A. Bouguettaya. RATEWeb: Reputation Assessment for Trust Establishment among Web Services. VLDB Journal, 18(4):885–911, 2009. D. Huynh, N. R. Jennings, and N. R. Shadbolt. Developing an Integrated Trust and Reputation Model for Open Multi-Agent Systems. In Proc. of 7th Intl Workshop on Trust in Agent Societies, pp. 66{74, July2004 	
32.	<p>Authors: Nikhil Sharma, Niharika Mehta</p> <p>Paper Title: Advanced Speech Compression VIA Voice Excited Linear Predictive Coding Using Discrete Cosine Transform (DCT)</p> <p>Abstract: One of the most powerful speech analysis techniques is the method of linear predictive analysis. This method has become the predominant technique for representing speech for low bit rate transmission or storage. The importance of this method lies both in its ability to provide extremely accurate estimates of the speech parameters and in its relative speed of computation. The basic idea behind linear predictive analysis is that the speech sample can be approximated as a linear combination of past samples. The linear predictor model provides a robust, reliable and accurate method for estimating parameters that characterize the linear, time varying system. In this project, we implement a voice excited LPC vocoder for low bit rate speech compression.</p> <p>Keywords: Autocorrelation, Discrete Cosine Transform, Levinson Durbin Recursion, Linear predictive coding (LPC).</p> <p>References:</p> <ol style="list-style-type: none"> L. R. Rabiner and R. W. Schafer, “Digital Processing of Speech Signals”, Prentice- Hall, Englewood Cliffs, NJ. B. S. Atal, M. R. Schroeder, and V. Stover, “Voice- Excited Predictive Coding System for Low Bit-Rate Transmission of Speech”, Proc. ICC, pp.30-37 to 30-40 http://www.data-compression.com/speech.html C. J. Weinstein, “A Linear Predictive Vocoder with Voice Excitation”, Proc. Eascon, September. Speech coding. a tutorial review by Andres s. Spanias member IEEE. Proakis John G. ‘Digital Communications’ .New York: Macmillan Pub. Co, Haykin Simon. ‘Digital Communication’. New M. H Johnson and A. Alwan, “ Speech Coding: Fundamentals and Applications”, to appear as a chapter in the encyclopedia of telecommunications, Wiley, December 2002. Orsak, G.C et al, “Collaborative SP education using the internet and MATLAB” IEEE Signal Processing Magazine, Nov, 2009 vol 12, no6, pp 23-32. 	144-148
33.	<p>Authors: Harikrishna Yadav. Nanganuru, Enzo Polambo</p> <p>Paper Title: Determination of Sulphydryl and Disulphide Groups in Lysozyme</p> <p>Abstract: Proteins contain several actual or potential sulphhydryl groups. These groups are very important for cellular respiration. A remarkable method of altering many proteins is to dissolve them in urea or other amide solutions. When a protein is partially denatured, that means only part of it is converted into a form insoluble under conditions under which the native protein is soluble, the insoluble fraction has the number of reactive SH and S-S groups characteristic of completely denatured protein, whereas the soluble fraction has the number characteristic of protein which has not been denatured at all. Finally, when a protein is converted by urea into a form which has an increased number of S-S groups, that form is insoluble in a medium in which native protein is soluble. In denaturation, formation of insoluble protein and increase in detectable SH and S-S groups are closely related aspect. The sulphide groups in the protein with DTNB in the tubes of 1, 2 and 3 having 1.365moles, 6.588moles and 0.158 moles respectively. Disulphide fluorescence quenching assay gives the number of moles of disulphide groups per mole of protein of the lysozyme was 10.4nmoles.</p> <p>Keywords: Lysozyme, Cary Eclipse, Fluorescence Quenching Assay and Bovine Serum Albumin.</p> <p>References:</p> <ol style="list-style-type: none"> Ghosh R. (2003) Biochem. Eng. J., 14, 109-116. Thammasirirak S., Ponkhams P., Preecharram S., Khanchanuan R., Phonyothee P., Daduang S., Srisomsap C., Araki T., Svasti J. (2006) Comparative Biochem. Physiol., 143, 209-217. 	149-153

	<ol style="list-style-type: none"> 3. Hopkins, F. G., and Dixon, M., J. Biol. Chem., 64, 527 (1922). 4. Hopkins, F. G., and Morgan, E. J., Biochem. J., 32, 611 (1938). 5. Hopkins, F. G., Nature, 126, 328, 383 (1930) 6. Hellerman, L., Physiol. Rev., 17, 454 (1937). 7. Smythe, C. V., J. Biol. Chem., 114, 601 (1936). 8. Balls, A. I., Lineweaver, H., and Thompson, R. It., Science, 86, 379 (1937). 9. Bersin, T., in Nord, F. F., and Weidenhagen, R., Ergebnisse der Enzym-forschung, Leipsic, 4 (1935). 10. Maver, M. E., Johnson, J. M., and Voegtlin, C., Nat. Inst. Health, Bull.fS4, 29 (1935). 11. Thannhauser, S. J., and Reichel, M., J. BioZ. Chem., 113, 311 (1936). 12. Stern, K. G., and White, A., J. Biol. Chem., 117,95 (1937). 13. du Vigneaud, V., Fitch, A., Pekarek, E., and Lockwood, W. W., J. BioZ. Chem., 94, 233 (1931-32). 14. Burk, N. F., and Greenberg, D. M., J. Viol. Chcm., 87, 197 (1930). 15. Burk, N. F., J. Biol. Chem., 120, 63 (1937). 					
34.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Authors:</td> <td>Dinesh Verma, Monika Kalra</td> </tr> <tr> <td>Paper Title:</td> <td>Free Convection MHD Flow past a Vertical Plate with Constant Suction</td> </tr> </table> <p>Abstract: The special effects of fluctuating gravitational field on free convection MHD flow past a homogeneously moving infinite erect porous plate with constant suction velocity in a porous medium have been analyzed. A constant heat flux is prearranged on the plate. The gravitational field is implicit in the form . The governing equations are solved by perturbation method. Fluid velocity and fluid temperature shows remarkable alter with alteration in gravitational field. Small increase in gravity modulation parameter shows considerable increase in amplitude of skin friction and has insignificant decreasing effect on phase of skin friction.</p> <p>Keywords: MHD, porous media, free convection, suction, unsteady, skin friction, Gravity modulation.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Satish C. Rajvanshi and Baljinder S. Saini, Int.J of Theoretical & Appl.Sc.2 (1): 29-33(2010). 2. B.S Saini and P.K Sharma, Ganita Sandesh. 20(2): 203(2006). 3. P.R Sharma, Journal of Physics. 25: 162(1992). 4. Y.Shu. B.Q. Li. And H.C. De Groh. Numerical Heat Transfer. 39:245 (2001). 5. T.C Jue.and B.Ramaswamy. Heat and Mass Transfer, 38: 665(2001). 6. S.Shardanand I. Pop. Heat and Mass Transfer. 32: 657(2005). 7. B.Q Li, Int. J Heat Mass Transfer, 39: 245 (2001). 8. M.Acharya, G.C Das and I.P.Singh, Indian J Pure Appl,Math., 31(1): 2000. 9. V.M.Soundalgekat and M.R.Patil. Astrophysics and Space Science. 70 (1): 179(1980). 10. S. Biringen and G.Danabasoglnf.J. Thermo Physics, 43: 357 (1990). 11. G Siddnchwat and S. Pranesh Journal of Magnetism and Magnatic Material, 192 (1): 159 (1999). 	Authors:	Dinesh Verma, Monika Kalra	Paper Title:	Free Convection MHD Flow past a Vertical Plate with Constant Suction	154-157
Authors:	Dinesh Verma, Monika Kalra					
Paper Title:	Free Convection MHD Flow past a Vertical Plate with Constant Suction					
35.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Authors:</td> <td>Bikash Sarkar, B.B.Sahu, B.C.Mohapatra, N.K.Barik, D.Majhi, P. Jayasankar, P.R.Bhatnagar</td> </tr> <tr> <td>Paper Title:</td> <td>Design and Development of an Innovative Mobile Fish Vending Unit for Retailers</td> </tr> </table> <p>Abstract: The purpose of this study was to design and develop a low cost mobile fish vending unit in urban/municipality areas with proper waste disposal. The prototype model was designed and fabricated using locally available materials at a cost of Rs.52780/-. The main feature of this prototype is that its100 and 70 L insulated chilled crates; utility box; Cutting and processing area; storage of water and waste disposal. Necessary effort has been made to maintain the possible market quality of fish and fish products in the form of raw and semi-processed/processed chilled products. Test trial of ergonomics evaluation indicated that the working heart rate (HR work) of the male operator ranged from 123.8 to 134 beats/min with a mean value of 131.9 ± 1.6 beats/min. The corresponding values with women were 119.0 to 149.6 and 131.2 ± 1.0 beats/min, respectively. The heart rate was lower with male as compared to the female. The forces on the pedal are 161.84 N and 377.6 N in case of first and second condition. The calculated mechanical advantages for first and second condition are 0.278 and 0.276, respectively. The design of mobile fish vending unit is stable. The operators both male and female have found the unit to be conducive both in terms of ergonomically as well as operationally.</p> <p>Keywords: Human powered utility vehicle (HPUV), Fishvending, FishHygiene, Fish retailers; Value added fish products, Rolling and Gradient resistance</p> <p>References:</p> <ol style="list-style-type: none"> 1. M.A. Upare, M.K. Shrivastavaand J.K.Samal, Draft report Livelihood assessment and micro finance programme for the Coastal living community in Odisha state,NABARD,India, 2008,pp.1-108. 2. S. K. Bhowmik and D. Saha, Street Vending in Ten Cities in India , School of Management and Labour Studies ,Tata Institute of Social Sciences Deonar, Mumbai 400 088, For National Association of Street Vendors of India, Delhi,2002. 3. A. S. Chetan and A.K. Mahalle, Design Optimization of Speed Ratio for Conventional Chain Drive Used In Tricycle. International Journal of Innovative Technology and Exploring Engineering (IJITEE), 2012, 1(1):1-4. 4. Paola Zamparo, Alberto E. Minetti, Pietro E. di Prampero“Mechanical Efficiency of Cycling With a New Developed Pedal- Crank” Journal of Biomechanics 35 (2002) 1387–1398. 5. Jeffery W. Rankin, Richard R. Neptune“A theoretical analysis Of an optimal chainring shape to maximize crank power during Isokinetic pedalling” Journal of Biomechanics 41 (2008) 1494–1502. 6. Danny Too and Gerald E. Landwer “The Biomechanics of Force and Power Production in human Powered Vehicles” Human Power: Technical Journal of the International Human Powered Vehicle Association, 55, 3-6. 7. P. Njenga and A. Davis. “Drawing the Roadmap to Rural Poverty Reduction,” Transport Reviews 23, no. 2 (April – June 2003): 217-241. 8. Darrow, Ken, and Mike Saxenian. Appropriate Technology Sourcebook: A Guide toPractical Books for Village and Small Community Technology. Stanford:Volunteers in Asia, 1986. 9. Schumacher, E.F. Small is Beautiful: Economics as if People Mattered. London:Harper and Row, Publishers, 1973. 10. Wiggles.wikia.com/wiki/Tricycle (Wikipedia, 2009) 11. P. O. Astrand and K. Rodahl.Text Book of Work Physiology. New York: McGraw Hill, 1977. 12. R. Yadav, M. Patel., S. P. Shukla, and S. Phund, Ergonomical evaluation of manually operated six row paddy transplanter. International Agricultural Engineering Journal, 2007, 16(3-4): 147-157. 	Authors:	Bikash Sarkar, B.B.Sahu, B.C.Mohapatra, N.K.Barik, D.Majhi, P. Jayasankar, P.R.Bhatnagar	Paper Title:	Design and Development of an Innovative Mobile Fish Vending Unit for Retailers	158-162
Authors:	Bikash Sarkar, B.B.Sahu, B.C.Mohapatra, N.K.Barik, D.Majhi, P. Jayasankar, P.R.Bhatnagar					
Paper Title:	Design and Development of an Innovative Mobile Fish Vending Unit for Retailers					

	13. Indian Farm Machine for the Month-December, 2012. Society of Agricultural Engineers, G-4, National Societies Block, National Agricultural Science Centre Complex, New Delhi -110012. Electronic News Letter, Month. December, Year- 2012.Pp.1-14.	
36.	Authors:	Arvind Dewangan, D.P.Gupta, R.K.Bakshi, Ram K. Manchiryal
	Paper Title:	Stress Distribution Analysis of the Kaolinite Layer at the Kaolinite –Geotextile
	<p>Abstract: The analysis of stress within a body implies the determination at each point of the body of the magnitudes of nine stress components. In other words, it is the determination of the internal distribution of stresses. An alternative method used in stress analysis is the determination of the internal distribution of strains. The differences between kaolinite and smectite structures are notable, mainly as a result of the degree of weathering in the different compounds. Nevertheless, the kaolinite structure possesses great advantages in many processes due to its high chemical stability and low expansion coefficient. Bearing capacity factors are available in the literature for estimation of the load-carrying capacity of unreinforced and reinforced unpaved roads, i.e. for soil layers with a granular fill overlying soft soil. This paper present the the stress distribution on the kaolinite layer at the kaolinite-geotextile or kaolinitefurnace ash interface, it measured with increases in footing pressure in order to assess the load dispersion angle over the soil layer. The predicted load dispersion angle is then used to estimate the bearing capacity factors of the soil layer with increases in footing deformation. This paper also focus typical vertical stress distributions measured below the interface (on the top surface of the kaolin layer) for a fill thickness of 110 mm with different footing pressures .</p> <p>Keywords: 1. Soil 2. Kaolinite 3. Geotextile 4. Clay 5. LayerSub Area: Soil Engineering Broad Area:Civil Engineering</p> <p>References:</p> <ol style="list-style-type: none"> 1. S. W. Barmu, Polymorphism of the Kaolin Minerals, Vol. 48, Nov. Dec, (1963) 1196 - 1209 2. Giroud and Noiray, Planar reinforcement, such as geogrid and geotextile, has been widely used in unpaved roads with established design methods. An analytical approach to the design of geotextile-reinforced unpaved roads was first introduced by them. 1981 3. M. R. Hausmann, Geotextiles for Unpaved Roads A Review of Design Procedures, 1987 4. Jorge C. Miranda-Trevino¹, Cynthia A. Coles, "Kaolinite properties, structure and influence of metal retention on pH" Applied Clay Science 23 (2003) 133– 139 5. G. Basu, A.N. Roy et al, Construction of unpaved rural road using jute–synthetic blended woven geotextile – A case study 2009. 	163-166
37.	Authors:	Bharti, Tejinder Thind
	Paper Title:	Background Subtraction Techniques-Review
	<p>Abstract: Background subtraction approach is used to detect the moving object from background. Different methods have been proposed to detect object motion by using different background subtraction techniques over recent years. Each technique has its own benefits and limitations such as some techniques can only applied for static background and some for dynamic backgrounds. This paper provides review of main methods used to detect foreground object with its merits and demerits. It would help the researchers to select the most appropriate technique according to the application.</p> <p>Keywords: Background subtraction, Gaussian mixture model, Region based ,pixel based</p> <p>References:</p> <ol style="list-style-type: none"> 1. Mahmood Amintoosi, Farzam Farbiz, Mahmood Fathy, Morteza Analoui, Naser Mozayani "QR decomposition –Based Algorithm for Background subtraction "ICASSP 2007 IEEE 2. Zhong Wei, Shuqiang, Qingming Huang" pixel-wise local information based background subtraction approach "ICME 2008 IEEE 3. Shih-Chieh Wang, Te-Feng Su and Shang-Hong Lai"Detecting Moving Object From Dynamic Background with Shadow Removal"ICASSP2011 IEEE 4. Massimo Piccardi "Background subtraction Techniques: a review"2004 IEEE International Conference on Systems, Man and Cybernetics 5. Dorra Riahi, Pier-Luc St-Onge and Guillaume-Alexandre Bilodeau" Rectguass-tex:block-based background subtraction" 6. http://www.cse.iitk.ac.in/users/tarunb/node4.html 	167-169
38.	Authors:	Gurleen Singh, Sakshi Sharma, Prabhdeep Singh
	Paper Title:	Design and Develop a Honeypot for Small Scale Organization
	<p>Abstract: Computer Network and Internet is growing every day. Computer networks allow communicating faster than any other facilities. These networks allow the user to access local and remote databases. It is impossible to protect every system on the network. In industries, the network and its security are important issues, as a breach in the system can cause major problems. Intrusion detection system (IDS) is used for monitoring the processes on a system or a network for examining the threats and alerts the administrator about attack. And IDS provide a solution only for the large scale industries, but there is no solution for the small scale industries so model is proposed for honeypot to solve the problem of small scale industries which is the hybrid structure of Snort, Nmap, Xprobe2, P0f. This model captures the activities of attackers and maintains a log for all these activities. Virtualization is performed with the help of virtual machine. The focus of this paper is primarily on preventing the attacks from external and internal attackers and maintaining the log file using honeypot with virtual machine.</p> <p>Keywords: Intrusion detection system, honeypots, attacker, security.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Y.K.Jain, S. Singh "HoneyPot based Secure Network System" in IJCSE. Vol 3. No.2 Feb 2011. 2. H.Artail, H.Safa, M.Sraj,I.Kuwalty , Z.Masri "A hybrid honeypot framework for improving intrusion detection systems in protecting organizational networks " Science Direct, 2006. 3. U.A.Sandhu, S.Haider, S.Naseer, O.U.Ateeb "A Survey of Intrusion Detection & Prevention Techniques" in IPCSIT vol.16, 2011. 	170-174

	<ol style="list-style-type: none"> 4. V.M.Boncheva "A Short Survey of Intrusion Detection Systems" 2007. 5. R.Baumann, C.Plattner "honeypots" Diploma Thesis in Computer Science, 2002 6. C.Doring "Improving network security with honeypots", 2005 7. R.K.Singh, T.Ramanujam "Intrusion Detection System Using Advanced Honeypots" IJCSIS vol. 2, no. 1, 2009. 8. L.Spitzner "HoneyPot:Definitions and Values" 2002. 9. F.Zhang, S.Zhou, Z.Qin, J.Liu "HoneyPot: a Supplemented Active Defense System for Network Security" IEEE 2003. 10. D.Schnackenberg, K.Djahandari, D.Strene "Infrastructure for Intrusion Detection and Response " DISCEX, 2000. 11. S. Mrdovic, E. Zajko "Secured Intrusion Detection System Infrastructure", ICAT 2005. 12. Y.Bai, H.Kobayashi "Intrusion Detection Systems: Technology and Development" AINA, 2003. 13. G.Bhatti, R.Singh, P.Singh "A look back at issues in the layers of TCP/IP model" IJERMC, vol.1, Issue.2, 2012. 					
39.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Authors:</td> <td>Sakshi Sharma, Gurleen Singh, Prabhdeep Singh</td> </tr> <tr> <td>Paper Title:</td> <td>Security Enhancing of a LAN Network Using Hardening Technique</td> </tr> </table> <p>Abstract: Computer Networks allows access to information and services in an organized as well as controlled manner. Security is needed to make your data immune to any kind of data breach or malicious virus attacks. Hardening is to make system hard to protect from unauthorized access and is an on-going process of providing security. As, LAN hardening is done to secure whole organization network from attacks. In this paper, model is proposed for LAN hardening to reduce security risk. LAN hardening is divided into three parts- client/server, hardware and topology hardening. By applying hardening techniques on all parts LAN is harden. In client hardening table is proposed to determine security steps of operating systems and server. In server hardening, concept of masking is introduced to protect user system and to create illusion for intruders. Hardware hardening is proposed using a Table to make whole network harder .hardening of topology can be done by choosing a best one. In this way hardening of LAN is performed.</p> <p>Keywords: Hardening, Honey pot, Masking, Security</p> <p>References:</p> <ol style="list-style-type: none"> 1. M.Kayri , I.Kayri,"A proposed OSI based network troubles identification model" ,IJNGN, Vol.2,No.3,2010 2. G.Bhatti, R.Singh and P.Singh,"A look back at issues in the layers of TCP/IP model", IJERMC,Vol.1,issue.2,2012 3. White Paper, "securing (hardening) window server", Alpha Net solutions 4. P.K.Patra, P.L.Pradhan, "Hardening of UNIX Operating system" , IJCCCT ,Vol.1,No.1,2009,P-72-79 5. R.Bragg,"Hardening windows systems", McGraw-Hill/Osborne,2004 6. J.Suess, M.Lukar and R.Petersen, "computer and network security in higher education ", Publication of EDUCAUSE,P-73-77 7. Y.K.Jain, S. Singh, "HoneyPot based Secure network system", IJCSSE, Vol.3, No. 2, Feb 2011. 8. D.W.Richardson, S.D.Gribble and T.Kohno, "The limits of automatic OS fingerprint generation", AISec'10,2010,P-1-3 9. O. Arkin, F. Yarochkin, and M. Kydraliev,"The present and future of Xprobe2: The next generation of active operating system fingerprinting" , The Sys-Security Group, July 2003,P-9-16 10. W.H.Gilmore,S.R.Hogg, " Cisco Router/switch hardening", INS,2013,P-3-6 11. D.Graesser, "cisco router hardening step by step", security essential ,Vol.1,2001 	Authors:	Sakshi Sharma, Gurleen Singh, Prabhdeep Singh	Paper Title:	Security Enhancing of a LAN Network Using Hardening Technique	175-182
Authors:	Sakshi Sharma, Gurleen Singh, Prabhdeep Singh					
Paper Title:	Security Enhancing of a LAN Network Using Hardening Technique					
40.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Authors:</td> <td>R. Ayyandurai, M. Suresh, S. Venkateswaran</td> </tr> <tr> <td>Paper Title:</td> <td>Evaluation of Groundwater for Irrigational Purposes in Cumbum Valley Theni District Tamilnadu India</td> </tr> </table> <p>Abstract: To evaluate the groundwater quality for irrigational purposes in Cumbum Valley, Theni District, Tamil Nadu covering a total area of about 1485.62 km² 55 groundwater samples was collected from dug and bore wells in the various locations of study area. The samples were analyzed for physico-chemical and calculated parameters viz., Ca⁺², Mg⁺², Na⁺, K⁺, CO₃⁻, HCO₃⁻, Cl⁻, SO₄⁻ and Kelley's ratio, SAR values, Mg-hazards, RSC have been worked out to know the suitability of the groundwater quality for irrigational purpose. Majority of the hydrochemical facies were identified using Piper trilinear diagram. It reveals that the subsurface water is alkaline earth (Ca+Mg) then alkalis (Na+K) type. The groundwater samples fall under class-I based on Doneen's classification and good to permissible category in the Wilcox classification. According to the SAR values plotted in the USSSL diagram, most of the groundwater samples belong to C3-S1 (41.82%) class indicating high salinity and low sodium water, which can be used for almost all types of soil with little danger of exchangeable sodium that the groundwater could be used for all types of crops on soils of medium to high permeability.</p> <p>Keywords: Cumbum Valley, Doneen's diagram, Irrigational, , Wilcox diagram USSSL (U.S. Salinity Laboratory diagram).</p> <p>References:</p> <ol style="list-style-type: none"> 1. Apha (american public health association) (1996) standard methods for the examination of water and wastewater, 19th eds. Public health association, washington, dc. 2. Ayers, r.s., (1977) quality of water for irrigation, j. Irrigation and drainage div., asce, vol. 103, no. Ir2, pp. 135-154. 3. Christiansen, j.e., e.c. Olsen and l.s. Willardson, (1977) irrigation water quality evaluation, j. Irrigation and drainage div., asce, vol.103, no. Ir2, pp. 155-169. 4. Doneen, l.d., (1964) notes on water quality in agriculture, water science and engineering. 5. EATON, E.M. (1950) significance of carbonate in irrigation water. Soil. Sci., v.69, pp.123-133. 6. KELLEY, W.P. (1951) alkali soils – their formation properties and reclamation, reinold publ. Corp., new york. 7. Michael, a.m., (1990) irrigation: theory and practice, vikas publishing house pvt. Ltd., new delhi, 801p. 8. PANDIAN, K., and SANKAR, K. (2007) Hydrogeochemistry and groundwater quality in the vaippar river basin, tamil nadu jour Of gsi, v.69, pp.970-982. 9. PIPER, A.M. (1944) a graphical procedure in the chemical interpretation of groundwater analysis, trans. Amer. Geophy. Union, v.25, pp.914-923. 10. RICHARDS, L.A., (1954) diagnosis and improvement of saline and alkali soils, u.s.d.a handbook, vol.60, 160p. 11. U.s. SALINITY LABORATORY STAFF, (1954) diagnosis and improvement of saline and alkali soils, u.s. Dept. Agriculture hand book – 60p. 12. Vogel, a.i. (1968) a text book of quantitative inorganic analysis including elementary instrumental analysis. 3rd edn, elbs/longman, 121p. 	Authors:	R. Ayyandurai, M. Suresh, S. Venkateswaran	Paper Title:	Evaluation of Groundwater for Irrigational Purposes in Cumbum Valley Theni District Tamilnadu India	183-186
Authors:	R. Ayyandurai, M. Suresh, S. Venkateswaran					
Paper Title:	Evaluation of Groundwater for Irrigational Purposes in Cumbum Valley Theni District Tamilnadu India					

	<p>13. Wilcox I.v (1955) classification and use of irrigation waters. Us department of agriculture, arc 969, washington dc.</p> <p>14. Garrels, r.m and christ, c.l (1965) solutions, minerals and equilibria. Harper and row, new york, n.y., 450p.</p> <p>15. Stumm, w. And morgan, j.j. (1970) aquatic chemistry. Wiley, new york, n.y. 1022p.</p> <p>16. Swaine, s. And schneider, p.j. (1971) the chemistry of surface water in prairie ponds. Am. Chem. Soc. Adv. Chem. Ser., v.106, pp.99-104</p> <p>17. Kimblin, r.t. (1995) the chemistry and origin of groundwater in triassic sandstone and quaternary deposits, northeast england and some u.k. Coparisons. Jour. Hydrology, v.172. Pp.293-311.</p> <p>18. Raju, k.c.b. (1998) importance of recharging depleted aquifers, state of the art of artificial resharge in india. Jour. Geol. Soc. India, v.51, pp.429-454.</p>					
41.	<table border="1"> <tr> <td>Authors:</td> <td>Amandeep Kaur, Puneet Bhardwaj, Naveen Kumar</td> </tr> <tr> <td>Paper Title:</td> <td>FPGA Implementation of Efficient Hardware for the Advanced Encryption Standard</td> </tr> </table> <p>Abstract: We present an efficient hardware architecture design & implementation of Advanced Encryption Standard (AES) – Rijndael cryptosystem. The AES algorithm defined by the National Institute of Standard and Technology (NIST) of United States has been widely accepted. All the cryptographic algorithms developed can be implemented with software or built with pure hardware. However with the help of Field Programmable Gate Arrays (FPGA) we tend to find expeditious solution and which can be easily upgraded to integrate any concordat changes. This contribution investigates the AES encryption and decryption cryptosystem with regard to FPGA and Very High Speed Integrated Circuit Hardware Description language (VHDL). Optimized and Synthesizable VHDL code is developed for the implementation of both 128-bit data encryption and decryption process. Xilinx ISE 10.1 software is used for simulation. Each program is tested with some of the sample vectors provided by NIST and output results are perfect with minimal delay. The synthesis results found from FPGA implementation by Xilinx Synthesis Tool on Virtex II pro kit shows that the computation time for generating the ciphertext by AES with 4 sbox and 2 dual port RAM is 6.922 ns.</p> <p>Keywords: Cryptography, Advanced Encryption Standard, Rijndael, S-box, key expansion, cipher text.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Menezes, A. and Vanstone, S. "Handbook of Applied Cryptography", CRC Press, Inc. 1996. 2. National Bureau of Standards, NBS FIPS PUB 46, "Data Encryption Standard", U.S. Department of Commerce, January 1977 3. Daemon, J., and Rijmen, V. "Rijndael: The Advanced Encryption Standard.", Dr. Dobb's Journal, 3, March 2001, 137-139. 4. B. Smith, "An approach to graphs of linear forms (Unpublished work style)," unpublished. 5. Daemon, J., and Rijmen, V. "The Design of Rijndael: The Wide Trail Strategy Explained." New York, Springer – Verlag, 2000. 6. I. M. Verbaughede, P.R. Schaumont, and, H. Kuo, "Deign and Performance Testing of a 2.29 Gb/s Rijndael Processor," 7. IEEE J. of Solid State-Circuit, Vol.38, No. 3, March 2003, pp. 569 – 572. 8. K. Gaj and P. Chodowiec, Comparison of the hardware performance of the AES candidates using reconfigurable hardware, inThe Third AES Candidates Conference, printed by the National Institute of Standards and Technology. 9. J. Wang, "Fundamentals of erbium-doped fiber amplifiers arrays (Periodical style—Submitted for publication)," IEEE J. Quantum Electron., submitted for publication. 10. A. J. Elbirt, W. Yip, B. Chetwynd, C. Paar, "An FPGA implementation and performance evaluation of the AES block cipher candidate algorithm finalists," Proc. 3rd Advanced Encryption Standard (AES) Candidate Conference. 11. 	Authors:	Amandeep Kaur, Puneet Bhardwaj, Naveen Kumar	Paper Title:	FPGA Implementation of Efficient Hardware for the Advanced Encryption Standard	187-190
Authors:	Amandeep Kaur, Puneet Bhardwaj, Naveen Kumar					
Paper Title:	FPGA Implementation of Efficient Hardware for the Advanced Encryption Standard					
42.	<table border="1"> <tr> <td>Authors:</td> <td>P. Palpandian, R. Jayagopal</td> </tr> <tr> <td>Paper Title:</td> <td>Geochemical Studies in Edapatty Puthur Village, Salem District, Tamil Nadu, India</td> </tr> </table> <p>Abstract: Edapatty is a small village in Attur taluk of Salem District in Tamil Nadu. To understand groundwater quality for pre and post-monsoon period, the pre-monsoon season over exploitation of groundwater leads to water level decreases. Thus the main objective of this study is to give an account of the hydrogeochemistry of the region, to trace the sourced of principal chemical constituents, their concentration and effects on utility. As a result, groundwater becomes very hard. In order to bring out the various physical and chemical characteristics of the groundwater in the study area, twenty four representative groundwater samples were collected from various location of the study area and analysed for various parameters and the result were reported in this project to arrive at a possible solution. After heavy rainfall from NE and SW Monsoon, the total hardness of the water decrease and get diluted due to infiltration. It leaches some chemical constituents, which are derived from fertilizers like Gypsum and Sulphate fertilizers used by farmers for the agriculture. It leads to concentration of Na, K and SO4 in groundwater. After precipitation, Ca, Mg and Cl concentration decreases. It may be due to dilution of these elements by the percolation of water.</p> <p>Keywords: Hydro geochemistry, Groundwater, Fertilizer, Precipitation.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Caroll,D. (1962) " Rain water as a chemical agent of geologic processes" – A review U.S. Geological Survey Water Supply Paper 1535 – G, 18pp, 1962. 2. Choubisa, S.L., Sompuria, K., Choubisa, D.K., Pandya, H., Bhatt,s.k. and Parmar, L. (1995). Fluoride content in domestic water sources of Dungarpur district of Rajasthan, Indian Jour, Environ. Health, v.37, pp.154 – 160. 3. (Divya) Impact of chemical fertilizers on water quality in selected agricultural areas of Mysore district, Karnataka, India. INTERNATIONAL JOURNAL OF ENVIRONMENTAL SCIENCES Volume 2, No 3, 2012. 4. Drever, J., The Geochemistry of Natural Waters: Surface and Groundwater Environments, Prentice-Hall, Upper Saddle River, (1997). 5. Durov, (1956) "Chiliger V. George in Durov's classification of Natural Waters and Chemical composition of Atmospheric Precipitation in U.S.S.R."A Review, Transactions, American Geophysical Union, Vol.37, No.3,pp.546-556. 6. Garrels, R.M., and Christ, C.L. (1965) Solutions, Minerals and Equilibria. Harper and Row, New York, N.Y., 450p 7. Indian Standards Institution (1983) "Indian Specification for Drinking Water", Is 1500. 8. Mohammad Hafizul Islam, Md. Mafizur Rahman and Fahmidah Ummul Ashraf (2010) Assessment of water quality and impact of effluents from fertilizer factories to the Lakhya River International Journal of Water Resources and Environmental Engineering Vol. 2(8), pp. 208-221. 9. Kimblin, R.T., (1995). The chemistry and origin of groundwater in Triassic sandstone and Quaternary deposits, Northwest England and some U.K. comparisons. Jour. Hydrology, v.172. pp.293–311. 	Authors:	P. Palpandian, R. Jayagopal	Paper Title:	Geochemical Studies in Edapatty Puthur Village, Salem District, Tamil Nadu, India	191-195
Authors:	P. Palpandian, R. Jayagopal					
Paper Title:	Geochemical Studies in Edapatty Puthur Village, Salem District, Tamil Nadu, India					

10. Pawar, N. J. (1993) Geochemistry of carbonate precipitation from the groundwaters in basaltic aquifers, An equilibrium thermodynamic approach, *Jour. Geol. Soc. India*, v.41, pp.119–131.
11. Piper, A.M. (1944) "A graphic procedure in the geochemical interpretation of water analyses, *Trans. Amer. Geo-physical Union*, V.25, pp.914 – 928.
12. Raju, K.C.B. (1998) Importance of recharging depleted aquifers, State of the art of artificial recharge in India. *Jour. Geol. Soc. India*, v.51, pp.429–454
13. Ramappa R. and Suresh.T.S. (1999) "Quality of Groundwater in relation to agricultural practices in Lokapavani river basin Karnataka," India. International seminar on application Hydrochemistry, Anna malai University, pp. 136-142.
14. Schoeller, H. *les eaux souterraines*, Masson & Cie. Paris, 642 pp., 1962
15. Stumm, W., and Morgan, J.J. (1970) *Aquatic Chemistry*, Wiley, New York, N.Y. 1022p.
16. Swaine, S., and Schneider, P. J., (1971) The chemistry of surface water in prairie ponds. *Am. Chem. Soc. Adv. Chem. Ser.*, v.106, pp.99–104
17. Todd, P.K. (1980) "Groundwater hydrology", Second Editions, John Wiley & Eastern Limited, New Delhi.
18. USGS (2002) Effects of Lawn Fertilizer on Nutrient Concentration in Runoff from Lakeshore Lawns, Lauderdale Lakes, Wisconsin.(Resources Investigations Report 02–4130)Impact of chemical fertilizers on water quality in selected agricultural areas of Mysore district, Karnataka, India
19. WHO (1971) "International Standards for Drinking water", World Health Organization Geneva.

Authors:

Devajit Mahanta, Prabodh Sarmah, Gautam Kr. Handique

Paper Title:

Computational and Experimental Study for Rational Design of Proteins

Abstract: Proteins perform a vast array of functions within living organisms, including catalyzing metabolic reactions, replicating DNA, responding to stimuli, and transporting molecules from one location to another. Proteins differ from one another primarily in their sequence of amino acids, which is dictated by the sequence of their genes, and which usually results in folding of the protein into a specific three-dimensional structure that determines its activity. Proteins are the most multifaceted macromolecules in living systems and have various important functions, including structural, catalytic, sensory, and regulatory functions. Rational design of enzymes is a great challenge to our understanding of protein structure and physical chemistry and has numerous potential applications. Protein design algorithms have been applied to design or engineer proteins that fold, fold faster, catalyze, catalyze faster, signal, and adopt preferred conformational states. The field of de novo protein design, although only a few decades old, is beginning to produce exciting results. Developments in this field are already having a significant impact on biotechnology and chemical biology. The application of powerful computational methods for functional protein designing has recently succeeded at engineering target activities. Here, we review recently reported de novo functional proteins that were developed using various protein design approaches, including rational design, computational optimization, and selection from combinatorial libraries, highlighting recent advances and successes

Keywords: Protein, amino acids, computational optimization

References:

1. <http://en.wikipedia.org/wiki/Protein>
2. Todd AE, Marsden RL, Thornton JM, Orengo CA (2005) Progress of structural genomics initiatives: an analysis of solved target structures. *J Mol Biol* 348: 1235-1260.
3. George RA, Spriggs RV, Bartlett GJ, Gutteridge A, MacArthur MW, et al. (2005) Effective function annotation through catalytic residue conservation. *Proc Natl Acad Sci U S A* 102: 12299-12304.
4. Sillitoe I, Dibley M, Bray J, Addou S, Orengo C (2005) Assessing strategies for improved superfamily recognition. *Protein Sci* 14: 1800-1810.
5. Lee D, Redfern O, Orengo C (2007) Predicting protein function from sequence and structure. *Nat Rev Mol Cell Biol* 8: 995-1005.
6. Liolios K, Tavernarakis N, Hugenholtz P, Kyrpides NC (2006) The Genomes On Line Database (GOLD) v.2: a monitor of genome projects worldwide. *Nucleic Acids Res* 34: D332-334.
7. Benson DA, Karsch-Mizrachi I, Lipman DJ, Ostell J, Wheeler DL (2006) GenBank. *Nucleic Acids Res* 34: D16-20.
8. Dessailly BH, Nair R, Jaroszewski L, Fajardo JE, Kouranov A, et al. (2009) PSI-2: structural genomics to cover protein domain family space. *Structure* 17: 869-881.
9. Chandonia JM, Brenner SE (2006) The impact of structural genomics: expectations and outcomes. *Science* 311: 347-351.
10. Levitt M (2009) Nature of the protein universe. *Proc Natl Acad Sci U S A* 106: 11079-11084.
11. Bradley P, Malmstrom L, Qian B, Schonbrun J, Chivian D, et al. (2005) Free modeling with Rosetta in CASP6. *Proteins* 61 Suppl 7: 128-134.
12. Bonneau R, Baker D (2001) Ab initio protein structure prediction: progress and prospects. *Annu Rev Biophys Biomol Struct* 30: 173-189.
13. Jin W, Kambara O, Sasakawa H, Tamura A, Takada S (2003) De novo design of foldable proteins with smooth folding funnel: automated negative design and experimental verification. *Structure* 11: 581-590.
14. Jaramillo A, Wernisch L, Hery S, Wodak SJ (2001) Automatic procedures for protein design. *Comb Chem High Throughput Screen* 4: 643-659.
15. Bolon DN, Grant RA, Baker TA, Sauer RT (2005) Specificity versus stability in computational protein design. *Proc Natl Acad Sci U S A* 102: 12724-12729.
16. Joachimiak LA, Kortemme T, Stoddard BL, Baker D (2006) Computational design of a new hydrogen bond network and at least a 300-fold specificity switch at a protein-protein interface. *J Mol Biol* 361: 195-208.
17. Ashworth J, Havranek JJ, Duarte CM, Sussman D, Monnat RJ, Jr., et al. (2006) Computational redesign of endonuclease DNA binding and cleavage specificity. *Nature* 441: 656-659.
18. Bolon DN, Mayo SL (2001) Enzyme-like proteins by computational design. *Proc Natl Acad Sci U S A* 98: 14274-14279.
19. Kaplan J, DeGrado WF (2004) De novo design of catalytic proteins. *Proc Natl Acad Sci U S A* 101: 11566-11570.
20. Jiang L, Althoff EA, Clemente FR, Doyle L, Rothlisberger D, et al. (2008) De novo computational design of retro-aldol enzymes. *Science* 319: 1387-1391.
21. Rothlisberger D, Khersonsky O, Wollacott AM, Jiang L, DeChancie J, et al. (2008) Kemp elimination catalysts by computational enzyme design. *Nature* 453: 190-195.
22. Lazar GA, Dang W, Karki S, Vafa O, Peng JS, et al. (2006) Engineered antibody Fc variants with enhanced effector function. *Proc Natl Acad Sci U S A* 103: 4005-4010.
23. Ogata K, Jaramillo A, Cohen W, Briand JP, Connan F, et al. (2003) Automatic sequence design of major histocompatibility complex class I binding peptides impairing CD8+ T cell recognition. *J Biol Chem* 278: 1281-1290.
24. Shifman JM, Choi MH, Mihalas S, Mayo SL, Kennedy MB (2006) Ca²⁺/calmodulin-dependent protein kinase II (CaMKII) is activated by calmodulin with two bound calciums. *Proc Natl Acad Sci U S A* 103: 13968-13973.
25. Cochran FV, Wu SP, Wang W, Nanda V, Saven JG, et al. (2005) Computational de novo design and characterization of a four-helix bundle protein that selectively binds a nonbiological cofactor. *J Am Chem Soc* 127: 1346-1347.

43.

196-205

	<p>26. Jurgens C, Strom A, Wegener D, Hettwer S, Wilmanns M, et al. (2000) Directed evolution of a (beta alpha)8-barrel enzyme to catalyze related reactions in two different metabolic pathways. <i>Proc Natl Acad Sci U S A</i> 97: 9925-9930.</p> <p>27. Canada KA, Iwashita S, Shim H, Wood TK (2002) Directed evolution of toluene ortho-monoxygenase for enhanced 1-naphthol synthesis and chlorinated ethene degradation. <i>J Bacteriol</i> 184: 344-349.</p> <p>28. Bornscheuer UT, Kazlauskas RJ (2004) Catalytic promiscuity in biocatalysis: using old enzymes to form new bonds and follow new pathways. <i>Angew Chem Int Ed Engl</i> 43: 6032-6040. 31. Pantazes RJ, Grisewood MJ, Maranas CD (2011) Recent advances in computational protein design. <i>Curr Opin Struct Biol</i> 21: 467-472.</p> <p>32. Samish I, MacDermaid CM, Perez-Aguilar JM, Saven JG (2011) Theoretical and computational protein design. <i>Annu Rev Phys Chem</i> 62: 129-149.</p> <p>33. Havranek JJ (2010) Specificity in computational protein design. <i>J Biol Chem</i> 285: 31095-31099.</p> <p>34. Kuhlman B, Dantas G, Ireton GC, Varani G, Stoddard BL, et al. (2003) Design of a novel globular protein fold with atomic-level accuracy. <i>Science</i> 302: 1364-1368.</p> <p>29. Kazlauskas RJ (2005) Enhancing catalytic promiscuity for biocatalysis. <i>Curr Opin Chem Biol</i> 9: 195-201.</p> <p>30. Saven JG (2011) Computational protein design: engineering molecular diversity, nonnatural enzymes, nonbiological cofactor complexes, and membrane proteins. <i>Curr Opin Chem Biol</i> 15: 452-457.</p>					
44.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Authors:</td> <td>R.Venkatachalapathy, P. Karthikeyan</td> </tr> <tr> <td>Paper Title:</td> <td>Benthic Diatoms in River Influenced By Urban Pollution, Bhavani Region, Cauvery River, South India</td> </tr> </table> <p>Abstract: The present-day study assesses diatom communities in river with relation to environmental conditions. Diatoms are susceptible to environmental conditions in river and their distribution is mainly governed by the physicochemical composition of the water. Diatoms and water samples were collected in 5 locations during summer season (May 2012). Analysed data were interpreted and the results are represented. Four statistical methods were used in this study, Cluster analysis, Canonical correspondence analysis (CCA), Principal component analysis (PCA) and Detrended correspondence analysis (DCA) were determined the species distribution and environmental gradients along polluted and unpolluted area with physical and chemical variables. A total of 37 diatom species distributed among 17 genera were recorded. The significance of water quality difference among the sampling sites was expressed by four strastical methods. Highly polluted water contain diatom species like Pleurosigma salinarum, Nitzschia thermalis, Gomphonema parvulum, Gomponema lanceolatum, Fragilaria intermedia in the densely populated and highly industrialized locations and slightly polluted water present the diatom species like Achnanthes minutissima Kutz, Cyclotella catenata and Cymbella tumida among sampling sites.</p> <p>Keywords: Diatom, Statistical method, Polluted water.</p> <p>References:</p> <ol style="list-style-type: none"> 1. APHA (American Public Health Association) (1996), Standard methods for the examination of water and wastewater, 19th eds. Public Health Association, Washington, dc. 2. V. D Bella, Benthic diatom communities and their relationship to water chemistry in wetlands of central Italy. 2007, <i>Ann. Limnol.</i> - Int. J. Lim. 43(2): 89-99. 3. T. Bere, Epipsammic diatoms in streams influencedby urban pollution, São Carlos, SP, Brazil. 2010, <i>Braz. J. Biol.</i> vol. 70, no. 4, p. 921-930 4. B. J. F. Biggs, Stream priphyton monitoring manual. New Zealand: NIWA. 2000. 5. K. M. M. Daskshine, Diatom distribution and status of organic pollution in sewage drains. <i>Hydronologia</i>, vol. 87, 1982, no. 3, p. 205-209. 6. T. T. Duong, Impact of Urban Pollution from the Hanoi Area on Benthic Diatom Communities Collected from the Red, Nhue and Tolich Rivers (Vietnam). <i>Hydrobiologia</i>, vol. 563, 2006, no. 3, p. 201-216. 7. C. Facca, Epipellic diatom spatial and temporal distribution and relationship with the main environmental parameters in coastal waters, <i>Estuarine, Coastal and Shelf Science</i>. 75: 35-49. 2007. 8. E. A. Lobo, Use of epilithic diatoms as bioindicators from lotic systems in southern Brazil, with special emphasis on eutrophication. <i>Acta Limnol. Bras.</i> vol. 16, no.1, 2004, p. 25-40. 9. M. Potapova, Distribution of benthic diatoms in US rivers in relation to conductivity and ionic composition. <i>Freshwater Biology</i>, vol. 48, no. 2, 2003, p. 1311-1328. 10. R. Venkatachalapathy and P. Karthikeyan, Environmental impact assessment of Cauvery river with diatoms at Bhavani, Tamil Nadu, India. <i>International Journal of Geology, Earth and Environmental Sciences</i> ISSN: 2277-2081 (Online), 2012, Vol. 2 (3) Sept-Dec, pp.36-42 11. R. Stevenson, Assessing environmental conditions in rivers and streams with diatoms. In: <i>The Diatoms: Applications for the Environmental and Earth Sciences</i>. Cambridge University Press, Cambridge, (eds Stoermer, E. F. and Smol, J. P.). 1999, 11-40. 12. R. K. Trivedy, Phytoplankton Ecology of the River Krishna in Maharashtra with Reference to Bio indicators of Pollution. In: <i>Assessment of Water Pollution</i>, Mishra, S.R (Ed.). APH Publishing Corporation, New Delhi, pp: 299-328. 1996. 13. World Health Organization (WHO) (1996) Guideline for drinking water quality. Vol.2. Health criteria and other supporting information, Geneva. Pp.973. 	Authors:	R.Venkatachalapathy, P. Karthikeyan	Paper Title:	Benthic Diatoms in River Influenced By Urban Pollution, Bhavani Region, Cauvery River, South India	206-210
Authors:	R.Venkatachalapathy, P. Karthikeyan					
Paper Title:	Benthic Diatoms in River Influenced By Urban Pollution, Bhavani Region, Cauvery River, South India					
45.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Authors:</td> <td>Atul S. Joshi, P.R.Deshmukh</td> </tr> <tr> <td>Paper Title:</td> <td>Hamming Distance Polygram Substitution Algorithm for Coding Optimization & Security</td> </tr> </table> <p>Abstract: The joint approach of integrating selective encryption & coding optimization is presented in this paper. Binary bit stream of the input is divided into the plaintext chunk of 64 bits. Random Key of 128 bits is generated. Key bits are then selected randomly. These randomly selected bits are change again randomly according to plaintext bits. Hamming distance is calculated in between the plaintext & changed key bits. Based on this Hamming distance codebook is form. Index of the codeword is treated as a cipher text which is itself a compressed code. Two levels of encryption is achieved in this work which makes the algorithm more secured than other encryption algorithm. The proposed algorithm is compared for standard test image on the basis compression performance & computational complexity. The result taken shows better performance of the proposed method over other standard methods</p> <p>Keywords: Hamming distance, Polygram substitution, Key, Encryption, Compression.</p> <p>References:</p> <ol style="list-style-type: none"> 1. D. Terry and D. Swinehart, "Managing stored voice in the etherphonesystem," <i>ACM Trans. Comput. Syst.</i>, vol. 6, no. 1, pp. 3-27, Feb. 1988. 2. L. Diez-Del-Rio et al., "Secure speech and data communication over the public switching telephone network," in <i>Proc. ICASSP-94</i>, Apr. 	Authors:	Atul S. Joshi, P.R.Deshmukh	Paper Title:	Hamming Distance Polygram Substitution Algorithm for Coding Optimization & Security	211-214
Authors:	Atul S. Joshi, P.R.Deshmukh					
Paper Title:	Hamming Distance Polygram Substitution Algorithm for Coding Optimization & Security					

	<p>1994.</p> <ol style="list-style-type: none"> 3. J. Meyer and F. Gadegast, "Security Mechanisms for Multimedia Data with the Example MPEG-1 Video," Technical Univ. Berlin, Berlin, Germany, Project Description of SEC MPEG, May 1995. 4. Intel Netstructure 7110 E-Commerce Accelerator Fact Sheet [Online]. Available: www.intel.com 5. M. Droogenbroeck and R. Benedett, "Techniques for a selective encryption of uncompressed and compressed images," in Proc. ACIVS, Ghent, Belgium, Sep. 2002. 6. H. Beker and F. Piper, Secure Speech Communications. New York: Academic, 1985. 7. B. Goldberg, S. Sridharan, and E. Dawson, "Design and crypt-analysis of transform-based analog speech scramblers," IEEE J. Select. Areas Commun., vol. 11, no. 5, p. 735, Jun. 1993. 8. S. Sridharan, E. Dawson, and B. Goldberg, "Fast Fourier transform based speech encryption system," in Commun., Speech and Vision, IEE Proc. I, vol. 138, 1991, p. 215. 9. C. Kuo and M. Chen, "A new signal encryption technique and its attack study," in Proc. IEEE Int. Carnahan Conf. Security Technology, Oct. 1991, p. 149. 10. E. Dawson, "Design of a discrete cosine transform based speech scrambler," Electron. Lett., vol. 27, no. 7, p. 613, Mar. 1991. 11. F. Ma et al., "Wavelet transform-based analogue speech scrambling scheme," IEEE Electron. Lett., vol. 32, no. 8, p. 719, Apr. 1996. 12. V. Milosevic et al., "Hadamard transform application in speech scrambling," in Proc. IEEE Int. Conf. Digital Signal Processing, Jul. 1997. 13. B. Goldberg, S. Sridharan, and E. Dawson, "Cryptanalysis of frequency domain analogue speech scramblers," in Proc. Inst. Electr. Eng. Commun., Speech Vis., vol. 140, Aug. 1993, p. 235. 14. C. Xydeas et al., "Speech scrambling prior to Ipc coding," in IEE Colloq. Security and Cryptography Application to Radio Systems, 1994, p. 9/1. 15. W. Zeng and S. Lei, "Efficient frequency domain selective scrambling of digital video," IEEE Trans. Multimedia, vol. 5, no. 1, p. 118, Mar. 2003. 16. G. A. Spanos and T. B. Maples, "Performance study of a selective encryption scheme for the security of networked, real-time video," in Proc. Int. Conf. Computer Communication and Networking, Oct. 1995. 17. "Security for real-time MPEG compressed video in distributed multimedia applications," in Proc. 15th IEEE Int. Phoenix Conf. Comput. Commun., Mar. 1996. 18. I. Agi and L. Gong, "An empirical study of secure MPEG video transmissions," in Proc. ISOC-SNDSS'96, Feb. 1996. 19. L. Qiao and K. Nahrstedt, "A new algorithm for MPEG video encryption," in Proc. 1st Int. Conf. Imaging Sci., Syst., Technol., Jul. 1997. 20. L. Tang, "Methods for encrypting and decrypting MPEG video data efficiently," in Proc. 4th ACM Int. Conf. Multimedia, Nov. 1996, p. 219. 21. L. Qiao et al., "Is MPEG encryption by using random list instead of zigzag order secure?," in Proc. IEEE Int. Symp. Consumer Electronics, Dec. 1997. 22. L. Qiao and K. Nahrstedt, "Comparison of MPEG encryption algorithms," Int. J. Comput. and Graph., vol. 22, no. 3, Jan. 1998. 23. C. Shi and B. Bhargava, "A fast MPEG video encryption algorithm," in Proc. 6th ACM Int. Conf. Multimedia, Sep. 1998. 24. C. Shi, S. Wang, and B. Bhargava, "MPEG video encryption in real-time using secret key cryptography," Proc. PDPTA'99, vol. 6, p. 2822, Jun. 1999. 25. H. Cheng and X. Li, "Partial encryption of compressed images and videos," IEEE Trans. Signal Process., vol. 48, no. 8, p. 2439, Aug. 2000. 26. C.-P. Wu and C.-C. J. Kuo, "Fast encryption methods for audio-visual data confidentiality," in SPIE Int. Symp. Information Technologies 2000, vol. 4209, Nov. 2000, p. 284. 27. A. Servetti and J. Martin, "Perception-based partial encryption of compressed speech," IEEE Trans. Speech Audio Process., vol. 10, p. 637, Nov. 2002. 28. "Perception-based selective encryption of g.729 speech," in Proc. ICASSP 2002, vol. 1, May 2002, pp. 621-624. 29. A. Barbir, "A methodology for performing secure data compression," in Proc. 29th Southeastern Symp. System Theory, Mar. 1997, p. 266. 30. H. Bergen and J. Hogan, "A chosen plaintext attack on an adaptive arithmetic coding compression algorithm," Comput. Secur., vol. 12, p. 157, 1993. 31. J. Cleary et al., "On the insecurity of arithmetic coding," Comput. And Secur., vol. 14, p. 167, 1995. 32. J. Lim, C. Boyd, and E. Dawson, "Cryptanalysis of adaptive arithmetic coding encryption scheme," in Proc. ACISP, 1997, pp. 216-227. 33. I. H. Witten and J. G. Cleary, "On the privacy afforded by adaptive text compression," Comput. and Secur., vol. 7, pp. 397-408, 1988. 34. D. Gillman, M. Mohtashemi, and R. Rivest, "On breaking a Huffman code," IEEE Trans. Inform. Theory, vol. 42, no. 3, p. 972, May 1996. 35. W. B. Pennebaker and J. L. Mitchell, JPEG Still Image Data Compression Standard. New York: Van Nostrand Reinhold, 1993. 36. C.-P. Wu and C.-C. J. Kuo, "Efficient multimedia encryption via entropy codec design," in Proc. SPIE Int. Symp. Electronic Imaging 2001, vol. 4314, Jan. 2001, p. 128. 37. J. Nechvatal et al., "Report on the Development of the Advanced Encryption Standard," National Institute of Standards and Technology, U.S. Dept. Commerce, Tech. Rep., Oct. 2000. 38. E. Filiol and C. Fontain, "A new ultrafast stream cipher design: COSciphers," in Proc. 8th IMA Conf. Cryptography and Coding, Dec. 2001.//www.halcyon.com/pub/journals/21ps03-vidmar 					
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Authors:</td> <td>Navneet Kaur, Ashima Singh</td> </tr> <tr> <td>Paper Title:</td> <td>Generating More Reusable Components while Development: A Technique</td> </tr> </table>	Authors:	Navneet Kaur, Ashima Singh	Paper Title:	Generating More Reusable Components while Development: A Technique	
Authors:	Navneet Kaur, Ashima Singh					
Paper Title:	Generating More Reusable Components while Development: A Technique					
46.	<p>Abstract: The Component Based Software Development (CBSD) is increasingly being adopted for software development. This approach uses reusable components as building blocks for constructing software systems. The main advantages of CBSD are reduced development time, cost and efforts along with many others. The advantages are mainly provided by the reuse of already built-in software components. But there are many factors that affect the reusability of a component across many applications. Some factors can be resolved during the development of the component to make component more reusable. In this paper, some factors that affect the component reusability have been discussed with the techniques to resolve those factors. Thus a technique has been proposed for Software Component Development Organizations (SCDO) to be used while developing the components in order to generate more reusable component.</p> <p>Keywords: CBSD, Component, Reusability, SDCO.</p> <p>References:</p> <ol style="list-style-type: none"> 1. W. B. Frakes and K. C. Kang, "Software reuse research: status and future," IEEE Transactions on Software Engineering, vol. 31, pp. 529-536, 2005. 2. M. Morisio, "Success and Failure Factors in Software Reuse," IEEE Transactions on Software Engineering, vol. 28, pp. 340-357, 2002. 3. B. Weide, "Reusable software components," Advances in computers, vol. 33, pp. 1-65, 1991. 4. Gui Gui and Paul. D. Scott, "Measuring Software Component Reusability by Coupling and Cohesion Metrics", JOURNAL OF COMPUTERS, VOL. 4, NO. 9, SEPTEMBER 2009. 5. Nasib S. Gill, "Reusability Issues in Component-Based Development", Department of Computer Science & Applications, M.D. University, Rohtak, Haryana. 6. SONG Cui-Ye, DU Cheng-Lie, "Formal Interface-Component Based Software Analysis and Design", School of Computer Science and 	215-221				

	Technology, Northwestern Polytechnical University,China,2010.	
	7. Usha Kumari and Shuchita Upadhyaya, "An Interface Complexity Measure for Component-based Software Systems", International Journal of Computer Applications , Volume 36– No.1, December 2011.	
	8. Reghu Anguswamy , "A Study of Factors Affecting the Design and Use of Reusable Component", Software Reuse Lab, Virginia Tech.,USA .	
	9. Gianluigi Caldiera and Victor R.Basili University of Maryland, " Identifying and qualifying Reusable Software Components", University of Maryland, February 1991.	
	Authors: Ankita Desai, Rachana Oza, Pratik Sharma, Bhautik Patel	
	Paper Title: Hypervisor: A Survey on Concepts and Taxonomy	
47.	<p>Abstract: Because of the advancement of VLSI technology and aggregate throughput of all devices of servers, we are having tremendous computing power which could not be utilized either 100% or optimized way. Virtualization technique has solved this problem by providing proper utilization of hardware resources. Virtualization refers to the abstraction of computer resources. It separates user and applications from the specific hardware characteristics they use to perform their task and thus creates virtual environment. The purpose of creating virtual environment is to improve resource utilization by aggregating heterogeneous and autonomous resources. This can be provided by adding a layer called HYPERVISOR between OS and underlying hardware. There are many market players who have launched the hypervisor. This paper mentions architectural specification of each hypervisor followed by common characteristics that each hypervisor poses.</p> <p>Keywords: AMD, Cloud Computing, Hypervisor, Intel VT-x, Virtualization.</p> <p>References:</p> <ol style="list-style-type: none"> 1. F. Belard, "Qemu, a Fast and Portable Dynamic Translator," in USENIX Association, 2005. USENIX Annual Technical Conference 2. J. Carlos, C. dos and S. Ramos. Security Challenges with Virtualization. 2009. 3. ExpertGlossary at http://www.expertglossary.com/virtualization/definition/hypervisor. 4. P. Galvin B. VMware vSphere Vs. Microsoft Hyper-V: A Technical Analysis. [White Paper] s.l. : CTI Strategy, 2009. 5. Xen. How Does Xen Works? [White Paper] 2009. 6. MSDN. Hyper-V Architecture. Microsoft Developer Network. [Online] MSDN, 2012. http://msdn.microsoft.com/en-us/library/cc768520(v=bts.10).aspx 7. RedHat. KVM – KERNEL BASED VIRTUAL MACHINE. [White Paper] 2009. 8. M, Neil. Hypervisor, Virtualization Stack, And Device Virtualization Architectures. s.l. : Microsoft WINHEC, 2006. 9. VMware. VMware Infrastructure Architecture Overview. [White Paper] 2006. 10. Xen. What is Xen Hypervisor? [White Paper] 2009 11. Zhao X, Borders K & Prakash A Virtual Machine Security Systems 	222-225
	Authors: Deepali Virmani, Gargi Mandal, Nidhi Beniwal, Saloni Talwar	
	Paper Title: Dynamic Data Aggregation Tree for Data Gathering in Wireless Sensor Network	
48.	<p>Abstract: Energy efficiency is the most important issue in all facets of wireless sensor networks (WSNs) operations because of the limited and non-replenish able energy supply. Data aggregation mechanism is one of the possible solutions to prolong the life time of sensor nodes and on the other hand it also helps in eliminating the data redundancy and improving the accuracy of information gathering, is essential for WSNs. Thus we can say that a key challenging question in Wireless Sensor Network is to schedule nodes activities to reduce energy consumption. In this paper we propose a Dynamic Data Aggregation Tree Algorithm (DDAT) in which we create aggregation tree which aim to reduce energy consumption, minimizing the distance traversed and minimizing the cost in terms of energy consumption. In DDAT the node having maximum available energy is used as parent node/ aggregator node. We concluded with the best possible aggregation tree minimizing energy utilization, minimizing cost and hence maximizing network lifetime.</p> <p>Keywords: Aggregation, Energy, Cost, Distance.</p> <p>References:</p> <ol style="list-style-type: none"> 1. M.Ding, X.Cheng, and G.Xue, "Aggregation tree construction in sensor networks," in Proc. of IEEE Vehicular Technology Conference (VTC'03), vol. 4, Orlando, FL, pp. 2168-2172, Oct. 2003. 2. K. Dasgupta, K. Kalpakis, and P. Namjoshi, "An efficient clustering-based heuristic for data gathering and aggregation in sensor networks," in Proc. of IEEE Wireless Communications and Networking Conference (WCNC'03), New Orleans, LA, pp. 1948-1953, Mar. 2003. 3. W. Zhang and G. Cao, "DCTC: Dynamic convoy tree-based collaboration for target tracking in sensor networks," IEEE Trans. Wireless Commun., vol. 3, no. 5, pp. 1689-1701, Sept. 2004. 4. J. Carle and D. Simplot-Ryl, "Energy-efficient area monitoring for sensor networks,"IEEE Computer Magazine, vol. 37, no. 2, pp. 40-46, Feb. 2004. 5. S. Upadhyayula, V. Annamalai, S. K. S. Gupta, "A low-latency and energy-efficient algorithm for converge cast," in Proc. of IEEE Global Telecommunications Conference (GLOBECOM'03), vol. 6, pp. 3525-3530, Dec. 2003. 6. R. Perlman, "Interconnections: Bridges, routers, switches", and internetworking protocol, 2nd ed., Addison-Wesley Professional Computing Series, Reading, MA, 1999. 7. I. Nikolaidis, J. J. Harms, and S. Zhou, "On sensor data aggregation with redundancy removal," in Proc. of 22nd Biennial Symposium on Communications, Ontario, CA, May 2004. 8. A.Boulis, S. Ganeriwal, and M. B. Srivastava, "Aggregation in sensor networks: An energy-accuracy trade-off," in Proc. of IEEE International Workshop on Sensor Network Protocols and Applications (SNPA'03), Anchorage, AK, pp. 128-138, May 2003. 9. E. J. Duarte-Melo, M. Liu, and A. Misra, "A modeling framework for computing lifetime and information capacity in wireless sensor networks," in Proc. of 2nd WiOpt:Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks, Cambridge, UK, pp. 45-52,Mar. 2004. 10. Sourabh Jain, Praveen Kaushik, Jyoti Singhai, "Energy efficient maximum lifetime routing for swireless sensor", Department of Computer Sciene and Engineering Maulana Azad National Institute of Technology, Bhopal, pp. 2122-2129,January2012 	226-230
49.	Authors: DianguinaDiarisso, Mamadou Saliou Diallo, Amadou Diao, Ousmane Sow, Idrissa Gaye, Fabé Idrissa Barro, Grégoire Sissoko	

	Paper Title: Development of Battery Charge/Discharge Regulator for Photovoltaic Systems
	<p>Abstract: This work present the development of a battery charge/discharge regulator for photovoltaic systems. The system is designed to operate at 12V and accept solar panel up to 100W. The charge/discharge regulator is an analog one with protections respectively against battery deep discharge and overcharge, thermal drift, short circuit and polarity inversion. The proposed regulator has been realized and tested in a solar home system (SHS) composed with AC lamps and DC/AC inverter</p> <p>Keywords: Battery, charge/discharge, regulator, SHS.</p> <p>References:</p> <ol style="list-style-type: none"> 1. J. P. Dunlop, Batteries and Charge Control in Stand-Alone Photovoltaic Systems: Fundamentals and Application, Sandia FSEC-CR-1292-2001, 1997. 2. Secondary cells and batteries for solar photovoltaic energy systems – General requirements and methods of test, IEC 61427, 1st edition, 1999. 3. S. R. Wenham, M. A. Green, M. E. Watt, R. Corkish, Applied photovoltaics, 2nd Edition, 2007, ARC Centre for Advanced Silicon Photovoltaics and Photonics. 4. J. N. Ingole, M. A. Choudhary, R.D. Kanphade, PIC based solar charging controller for battery, International Journal of Engineering Science and Technology Vol. 4 No.02 February 2012, pp384-390. 5. Sudeendra Kumar K, Sushant Ku. Pattnaik, Ayaskanta Swain, Jitendra Ku. Das and K. K. Mahapatra, HCS08 microcontroller based novel PWM controller for battery charger application, IEEE Sponsored Conference on Computational Intelligence, Control And Computer Vision In Robotics & Automation (CICCRA), 2008, pp175-179 6. F. Krim, Design and implementation of a novel microcontroller-based battery charge controller for maximum-power operation of stand-alone photovoltaic power systems, Can. J. Elect. Comput. Eng., Vol. 27, No. 2, april 2002, pp. 55–59. 7. E. Koutroulis, K. Kalaitzakis, Novel battery charging regulation system for photovoltaic applications, IEE Proc.-Electr. Power Appl., Vol. 151, No. 2, March 2004, pp.191-197. 8. A. P. S. Negi, D. Bagai, R. Mahajan, A Simple Charge Controller Scheme Based on PWM for Solar Standalone Lighting Systems, latest trends on energy & development, environment & biomedicine, pp.34-37.
50.	<p>Authors: Pankaj Vohra, Ashima Singh</p> <p>Paper Title: Automatic Fragmentation and Storage of Code in Component Repository w.r.t their Input and Output Interfaces: A Tool</p> <p>Abstract: Develop once, Use once is the common approach followed by software developers in software industry. Lot of software development effort, cost as well as time is wasted if the software components can't be reused further. These efforts can be saved by reusing available components. In order to increase the availability of reusable components (with or for reuse), we need an effective component storage structure i.e. Repository and also automatic component addition and extraction from Component Repository. Auto-Detect-Fragment-Store is a staged technique which is used for the automatic storage and retrieval of source-code components. A component repository is constructed which stores automatically, fragmented code on the basis of inputs and outputs. This work is an effort towards automating component storage, its addition and retrieval in a way component can be reused and software reusability is enhanced.</p> <p>Keywords: Component, CBD (Component Based Development), CBSE (Component Based Software Engineering), Component Repository, Repository.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Sommerville Ian, "Software Engineering", 9th edition. 2. Luqi and Jiang Guo, "Toward Automated Retrieval for a Software Component Repository", Proceedings of IEEE International Conference and Workshop on the Engineering of Computer Based Systems (IEEE ECBS), Nashville, USA, March 7-12, 1999. Pp. 99-105. 3. Luqi and Jiang Guo, "A Survey of Software Reuse Repositories", Research supported by ARO(38690-MA) and DARPA(99-F759). 4. Grady Booch, James Rumbaugh, Ivar Jacobson "The Unified Modeling Language User guide", 2005 5. Roger S. Pressman, Software Engineering – A practitioner's Approach, McGraw- Hill International Edition, 6th Edition 2001.

231-234

235-238