

Volume 3 Issue 1, December 2014

**International Journal of Innovative
Science and Modern Engineering**

ISSN : 2319 - 6386 (Online)

Website: www.ijisme.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 Coordinator, Department of Computer Science & Engineering, Sree Narayana Gurukulam College of Engineering, Kadayiuruppu, Kolenchery, Kerala, India

Dr. C. Venkatesh

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

Dr. Nilay Khare

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

Dr. Sandra De Iaco

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

Dr. Yaduvir Singh

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

Dr. Angela Amphawan

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

Dr. Ashwini Kumar Arya

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

Dr. Yash Pal Singh

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

Dr. Ashish Jain

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

Dr. Abhay Saxena

Associate Professor & Head, Department of Computer Science, Dev Sanskriti University, Haridwar, Uttarakhand, 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, Chuncheon, Gangwondo, Korea

Dr. Sanjay M. Gulhane

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

Dr. K.K. Thyagarajan

Principal & Professor, Department of Information Technology, RMK College of Engineering & Technology, RSM Nagar, Thiruvallur, Tamil Nadu, India

Dr. P. Subashini

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

Dr. G. Srinivasrao

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

Dr. Rajesh Verma

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

Dr. Pawan Kumar Shukla

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

Dr. U C Srivastava

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

Dr. Reena Dadhich

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

Dr. Aashis. S. Roy

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

Dr. Sudhir Nigam

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

Dr. S. Senthil Kumar

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

Dr. Gufran Ahmad Ansari

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

Dr. R. Navaneetha krishnan

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

Dr. Hossein Rajabalipour Cheshmejjaz

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

Dr. Veronica McGowan

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

Dr. Sanjay Sharma

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

Dr. Taghreed Hashim Al-Noor

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

Dr. Madhumita Dash

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

Dr. Anita Sagadevan Ethiraj

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

Dr. Sibasis Acharya

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

Dr. Neelam Ruhil

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

Dr. Faizullah Mahar

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

Dr. K. Selvaraju

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

Dr. M. K. Bhanarkar

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

Dr. Sanjay Hari Sawant

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

Dr. Arindam Ghosal

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

Dr. M. Chithirai Pon Selvan

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

Dr. S. Sambhu Prasad

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

Dr. Muhammad Attique Khan Shahid

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

Dr. Kuldeep Pareta

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

Dr. Th. Kiranbala Devi

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

Dr. Nirmala Mungamuru

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

Dr. Srilalitha Girija Kumari Sagi

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

Dr. Vishnu Narayan Mishra

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

Dr. Yash Pal Singh

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

Dr. Sripada Rama Sree

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

Dr. Rustom Mamlook

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

Managing Editor

Mr. Jitendra Kumar Sen

International Journal of Innovative Science and Modern Engineering (IJISME)

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-3 Issue-1, December 2014, ISSN: 2319-6386 (Online) Published By: Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd. | | Page No. |
|-------|---|--|----------|
| 1. | Authors: | D. Mohana Rao, Bapi Raju Bandam M. E | |
| | Paper Title: | Preparation and Characterization of AL-Fly Ash Metal Matrix Composite by Stir Casting Method | |
| | <p>Abstract: Composites involve two or more component materials that are generally combined in an attempt to improve material properties such as stiffness, strength, toughness. Composed of a discrete reinforcement & distributed in a continuous phase of matrix, composites are the most successful materials used for recent works in the industry. There has been an increasing interest in composites containing low density and low cost reinforcement. Among various reinforced materials used, fly ash is one of the most inexpensive and low density reinforcement available in large quantities as waste product during combustion of coal in thermal plant. In this paper AL- fly ash composites produced by fly ash were observed with the help of optical microscopy. The hardness, tensile, toughness tests were carried on the composite. Physical and mechanical properties of composite were obtained.</p> <p>Keywords: Composite material, fly ash, metal matrix composites, stir casting.</p> <p>References:</p> <ol style="list-style-type: none">1. Vivekananthan M. and Senthamarai k, "Experimental Evaluation of Aluminium-Fly Ash Composite Material to Increase the Mechanical & Wear Behaviour by Stir Casting Method", CARE Journal of Applied Research (ISSN 2321-4090).2. Deepak Singla, S.R. Mediratta, "Evaluation of mechanical properties of AL-fly ash composite material", International Journal of Innovative Research in Science, Engineering and Technology Vol. 2, Issue 4, April 2013.3. Mahendra.K.V and Radh"akrishna. K, " Castable composites and their application in automobiles, Proc. IMechE Vol. 221 Part D: J. Automobile Engineering, (2007): pp. 135-1404. Mohanty Samrat, Chugh Y.P., "Development of fly ash based automotive brake lining", Tribology International 40 (2007): pp. 1217-12225. Rohatgi P.K, Weiss D, and Gupta Nikhil, "Applications of Fly Ash in Synthesizing Low-Cost MMCs for Automotive and Other Applications", Journal of the Minerals, Metals and Materials Society, vol 58,(2006): pp 71-766. Sarkar S., Sen S. and Mishra S. C, "Aluminum – fly ash composite produced by impeller mixing", Journal of reinforced plastics and composites,(2008):pp 1-67. William D. Callister, Jr., Materials Science and Engineering-Materials Science and Engineering-An Introduction. Asia, John Wiley & Sons, 20018. Rizam. S.S. Hafizal.Y, "Effect of particle coating on matrix-reinforcement bonding", IcoSM (2007): pp174-1779. Sarkar S Mohan S, Panigrahi S.C, "Effect of particle distribution on the properties of aluminum matrix insituparticulate composites", Journal of reinforced plastics and composites, vol. 27(2008):pp 1177-1187.10. Radhakrishna M. Ramachandra K., " Effect of reinforcement of flyash on sliding wear, slurry erosive wear and corrosive behavior of aluminium matrix composite", Wear 262 (2007): pp1450-1462.11. ROHATGI, P.K (2006):- "Applications of fly ash in synthesizing low cost Metal Matrix Composites for automotive and other engineering applications", JOM, vol. 58, issue no.11, pp.71-76,2006.12. RAO, J.BABU (2010):- "Development of light weight ALFA composites", interntional journal of engineering, science and technology.Vol.2,issue no.11, pp. 50-59, 10. 20 | | |
| 2. | Authors: | Shivanand, Dheeraj Kumar | |
| | Paper Title: | Introduction and Simulation of Distributed Power Flow Controller (DPFC) | |
| | <p>Abstract: This paper represents a new dimension of the Flexible AC Transmission System (FACTS) called as Distributed Power-Flow Controller (DPFC). The aim of this paper is to develop a new type of power-flow controlling device that offers the same control capability as the UPFC, at a reduced cost and with increased reliability. The new device, the so-called Distributed Power Flow Controller (DPFC), is a further development of the UPFC. The DPFC is derived from the unified power -flow controller (UPFC) and DPFC has the same control capability as the UPFC. The DPFC can be considered as a UPFC with an eliminated common dc link. The active power exchange between the shunt and series converters, which is through the common dc link in the UPFC, is now through the transmission lines at the third -harmonic frequency. The interaction between the DPFC, the network and the machines are analyzed.</p> <p>Keywords: FACTS, Power Flow Controlling Devices, UPFC, DPFC, Modeling, power transmission, Power Flow Control, Power electronics, Power semiconductor device.</p> <p>References:</p> <ol style="list-style-type: none">1. Z. Yuan, S. W. H. de Haan, and B. Ferreira, "A new facts component: Distributed power flow controller (DPFC)" in Power Electronics and Applications, 2007 European Conference on, 2007.2. Zhihui Yuan, Sjoerd W.H.de Haan, J Braham Ferreira and Dalibor Cvoric "A FACTS Device: Distributed Power Flow Controller (DPFC)" IEEE Transactions Power Electronics, vol. 25, no.10, October 2010.3. M. D. Deepak, E. B. William, S. S. Robert, K. Bill, W. G. Randal, T. B. Dale, R. I. Michael, and S. G. Ian, "A distributed static series compensator system for realizing active power flow control on existing power lines" IEEE Trans. Power Del., vol. 22 Jan. 2007.4. Zhihui Yuan, Sjoerd W.H de Haan and Braham Frreira "DPFC control during shunt converter failure" IEEE Transaction on Power Electronics 2009.5. Z. Yuan, S. W. H. de Haan, and B. Ferreira, "Utilizing Distributed Power Flow Controller (DPFC) for Power Oscillation Damping" IEEE Power and Energy Society General Meeting 2009.6. Z. Yuan, S. W. H. de Haan, and B. Ferreira, "Construction and First Result of a Scaled Transmission System with the Distributed Power Flow Controller (DPFC)" European Conference on Power Electronics and Applications (EPE) 2009.7. Z. Yuan, S. W. H. de Haan, and B. Ferreira, "Control Scheme to Improve DPFC Performance during Series Converter Failures" IEEE Power and Energy Society General Meeting (PESGM) 2010, Minneapolis, USA. | | |

| | | |
|--|---|-------|
| | <div>8. Salaet, J. Alepuz, S. Gilabert A Bordonau, "DQ transformation development for single-phase systems to compensate hannonic distortion and reactive power". In Power Electronics Specialists Conference, IEEE, 2004.</div> <div>9. Sarimalla Pedakotaiiah and Santosh A "Simulation of distributed power-flow controller (DPFC)" research inventory: International Journal of Engineering and Science, Vol. 2,jan. 2013.</div> <div>10. Praveena and M. Mahendran "The compensation of unbalanced 3-phase currents in transmission systems on utilize distributed power flow controller" IJRET Apr. 2013.</div> <div>11. P. Ramesh and M. Damodara Reddy "Power transfer capability & reliability improvement in a transmission line using distributed power- flow controller" International Journal of Electrical and Computer Engineering (IJECE), Vol.2, Aug. 2012.</div> <div>12. A.Jamshidi, S. Masoud Barakati, and M.M.Ghahderijani "Power quality improvement and mitigation case study using distributed power flow controller" IEEE Industrial Electronics,2012.</div> <div>13. K.Ramya and C.Christober Asir Rajan, "Analysis and regulation of system parameters using DPFC" IEEE - International Conference On Advances In Engineering, Science And Management (ICAESM -2012) March, 2012.</div> | |
| | <div><div>Authors:</div><div>Sadhana A. Bhonde, Sanjay B. Bodkhe</div></div> <div><div>Paper Title:</div><div>Integration of Renewable Energy - Challenges in Smart Grid</div></div> | |
| | <div><div>Abstract:</div><div>The increase penetration of renewable energy, use of electronic load in to the electric grid which involves a challenge regarding the power quality issues and energy management. These penetrations will increase harmonic distortion, frequent switching of load will result in flicker. This paper presents challenges and power quality approach in smart grid integration for maintaining grid quality at point of common coupling in grid distribution system. The integration of smart grid is equipped with voltage source converter, renewable sources, conventional energy generators and storage systems. The power control scheme is the voltage source converters operated in current controlled mode with hysteresis control in order to maintain power quality requirements in distributed system. Test results are presented to demonstrate the effectiveness of the control technique that is used for maintaining power quality in smart grid integration.</div></div> <div><div>Keywords:</div><div>Harmonic compensation, Renewable- Energy Source Integration, Smart grid.</div></div> <div><div>References:</div><div><div>1. Juan Manel, Carrasco,"Power Electronic System for Grid Integration of Renewable Energy Source: A Survey", IEEE Trans on Industrial Electronics, vol. 53, No. 4, pp 1002-1014, 2006.</div><div>2. A. Mohd, E. Ortjohann, A. Schmelter, N. Hamsic, and D. Morton, "Challenges in integrating distributed energy storage systems into future smart grid," in Proc. IEEE Int.Symp. Industrial Electronics, June 30–July 2, 2008, pp. 1627– 1632.</div><div>3. J.M. Guerrero, F. Blaabjerg, T. Zhelev, K. Hemmes, E. Monmasson, S. Jemei, M.P. Comech, R. Granadino , "Distributed Generation", IEEE Ind. Electron. Mag. , , pp. 52-64. March2010</div><div>4. Scott, Nigel C.; Atkinson, David J.; Morrell, James E.:Use of load control to regulate voltage on distribution networks with embedded generation - Power Systems, IEEE Transactions on. Power Systems Vol.17 , pp. 510–516.2002.</div><div>5. R.S.Bhatia,S.P.Jain,D.K.Jain,B.Singh, "Battery energy storage system for power conditioning of renewable energy sources.", in proc. of Int. Conf. Power Electron Drives system,Vol.1.pp.501-506,Jan2006</div><div>6. J.M. Guerrero, F. Blaabjerg, T. Zhelev, K. Hemmes, E. Monmasson, S. Jemei, M.P. Comech, R. Granadino , "Distributed Generation", IEEE Ind. Electron. Mag. , , pp. 52-64. March2010</div><div>7. F. Blaabjerg, R. Teodorescu, M. Liserre and A.V. Timbus, " Overview of control and grid synchronization for distributed power generation systems", IEEE Trans. On Industrial Electronics, vol. 53, no. 5, pp 1398-1409, Oct. 2006</div><div>8. He, Y. W. Li, and M. S. Munir, "A flexible harmonic control approach through voltage controlled DG-grid interfacing converters," IEEE Trans. Ind. Electron., vol. 59, no. 1, pp. 444-455,Jan.2012</div><div>9. Fu.Sheng Pai, Shyh-lir Hung, "Design and Operation of Power Converter for Microturbine Powered Distributed Generator with Capacity Expansion Capability."IEEE Trans. on Energy Conversion, Vol. 3, No.1, pp.110-116, March 2008.</div><div>10. F.Blaabjerg, Z.Chen, S.B.Kjaer., " Power Electronics as efficient interface in dispersed power generation System."IEEE Trans. On Power Electron. Vol.19, No.5, pp.1184-1194., Sept.2004.</div><div>11. Sung-Hun,Seong R Lee ,Hooman Dehbonei, Chemmangot V. Nayar," Application Of Voltage-and Current–Controlled Voltage Source Inverters for Distributed Generation System.," IEEE Trans. On Energy Conversion, Vol.21, No.3, pp. 782-788, Sept.2006.</div><div>12. Zeng,J.Yu. C.Qi,Q.,Yan,Z., "A novel hysteresis current control for active power filter with constant frequency", Elect.Power Syst.Res.,Vol. 68,pp. 75-82,2004.</div><div>13. Tatsuto Kinjo, Tomonobu Senjyu, "Output Leveling of Renewable Energy by Electric Double – Layer Capacitor Applied for Energy Storage System", IEEE Trans on Energy Conversion, Vol.21, No.1, March 2006.</div><div>14. M.I.Milands,E.R.cadavai andF.B.Gonzalez, "Comparison of control strategies for shunt active power filters in three phase four wire system",IEEETrans.Power lectron.,Vol.22,No.1,pp.229-236,Jan2007.</div><div>15. P.Siemes, H.J.Haubrich, H.Vennegeerts, "Concepts for the improved integration of wind power into German interconnection System", IET Review, Vol.2,No.1,pp.26-33.,Power generation-2008</div><div>16. S.A. Bhonde,S.B. Bodkhe, S.W.Mohod , "Smart Grid Integration for Power Quality in Grid system", International Journal of Innovative research in Electrical, Electronic, Instrumentation,Control Engineering, Vol.1, Issue 6,Sept.2013 .</div><div>17. S.W.Mohod, M.V.Aware, "A STATCOM-Control Scheme for Grid Connected Wind Energy System for Power Quality Improvement", IEEE System Journal , Vol.4, Issue-3, pp.-346-352,Sept-2010</div></div></div> | 11-15 |
| | <div><div>Authors:</div><div>Ashok P, V. Hariharan, R. Lavanya, R. R. Prianka</div></div> <div><div>Paper Title:</div><div>Extraction of Most Relevant Data from Deep Web Mining</div></div> | |
| | <div><div>Abstract:</div><div>Extraction of web content from the deep web page is the tough task to retrieve the relevant data because they are web page programming language dependent. The challenges of such web page extraction are increases every day due to expanding of huge web database, which makes the researchers to concentrate on deep web mining. Whenever user submits a query into search engine, it retrieves the list of best matching web page with short summary of notes such as title, some text from specific site. But retrieved information from web database is locked as deep web (Hidden Web or Invisible Web) on web page. In this paper, we proposed ontological technique with WordNet to extract the data records from the deep web pages. This technique discovers best matching words, eliminates unnecessary tags and able to extract large variety of data records with different structures.</div></div> | 16-18 |

| | | | |
|----|--|--|--------------|
| | <p>Keywords: Ontology, Deep web, WordNet, Web Mining.</p> <p>References:</p> <ol style="list-style-type: none"> 1. MICHAEL K. BERGMAN, "The Deep Web: Surfacing Hidden Value," The journal of Electronic publishing. 2. Christiane Fellbaum, "WordNet: An Electronic Lexical Database," The MIT Press, Cambridge, MA, 1998. 3. Munindar P. Singh • North Carolina State University • singh@ncsu.edu 4. Wei Liu, Xiaofeng Meng, Member, IEEE, and Weiyi Meng, Member, IEEE "ViDE: A Vision-Based Approach for Deep Web Data Extraction " 5. B.Aysha Banu, M.Chitra," A Novel Ensemble Vision Based Deep Web Data Extraction Technique for Web Mining Applications", "IEEE International Conference on Advanced Communication Control and Computing Technologies (ICACCCT) ",2012 6. D. Cai, S. Yu, J. Wen, and W. Ma, "Extracting Content Structure for Web Pages Based on Visual Representation," Proc. Asia Pacific Web Conf. (APWeb), pp. 406-417, 2003. 7. Bergman, Michael K,"White Paper: The Deep Web: Surfacing Hidden Value", Volume 7, Issue 1: Taking License, August, 2001 DOI: http://dx.doi.org/10.3998/3336451.0007.104 8. Jer Lang Hong "Deep Web Data Extraction" School of IT, Monash University 9. "Sasikala.D1, Selva Kumar.G2" Extraction of Deep Web Contents" International Journal of Modern Engineering Research (IJMER), Vol.2, Issue.1, Jan-Feb 2012 pp-528-533 | | |
| 5. | Authors: | S. C. Sahoo, AmitavaSil, A. Solanki | |
| | Paper Title: | Studies on Flame Retardancy Properties of a Novel Epoxy-Polysulphide based Coating on Wood Panel Products and Bamboo Composites | |
| | <p>Abstract: The objective of the study is to develop a Poly sulphide –Epoxy resin based halogen free novel flame retardant coating which forms an insulating layer in the event of fire and its flame retardancy properties on wood based panel products and bamboo composites .The coating formulation was optimized by poly sulphide based epoxy resin as binder, ceramic material, carbohydrate and halogen free fire retardant which forms an insulating layer on the surface and blowing agent . In order to evaluate the flame retardancy properties the optimized coating was coated on the surface of plywood and bamboo composites and flame retardancy properties was carried as per both IS/BS Specifications . The data reveals that the excellent flame retardancy properties like flame penetration, flammability was achieved, however the rate of burning was satisfactorily when tested as per IS: 5509. A Flame of LPG was allowed to play on the surface of coated and uncoated specimen to test Ignitability .and surface spread of flame .Result shows excellent flame retardancy properties compare to conventional flame retardant coating used .From physical observation it was observed that Thick coatings insulate the treated material against high temperatures. the coating melts under the action of heat, covering the treated material with an impermeable insulating crust that deprives the wood of oxygen. However the study reveals the generation of some gases on event of fire though there was no halogen and ammonium gases and coating was intumscent in nature.</p> <p>Keywords: Polysulphide–Epoxyresin, Halogenfree novel flame retardant, IS/BS Specifications, intumscent.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Fire-retardant properties of wood particleboards treated with boric acid. RogerPedieu • Ahmed Koubaa • Bernard Riedl•Xia-Ming Wang • James Deng. 2. Flammability behaviour of wood and a review of the methods for its reduction Laura Anne Lowden* and Terence Richard Hull 3. 3-Terzi E, Kartal SN, White RN, Shinoda K, Imamura Y (2009) Fire performance and decay resistance of solid wood and plywood treated with quaternary ammonia compounds and common fire retardants. Eur J Wood Prod. 4. 4-Mouritz AP, Gibson AG (2006) Fire properties of polymer composite material. Springer, Berlin, pp 59–101, Chap 3 5. 5-PereyraAM, Giudice CA (2009) Flame-retardant impregnants for woods based on alkaline silicates. Fire Saf J 44:497–503 6. Indian standard IS 5509:2000-Fire retardant plywood-specification-second revision. 7. Indian standard IS 1734:2000 Part-3,Fire retardant plywood-test method 8. Ayrlimis N, Candan Z, White R (2007) Physical mechanical and fireproperties of oriented strandboard with fire retardant treated veneers.HolzRoh- Werkst 65:449–458 9. Basson GR, Conradie WE (2001) Preservative and fire-retardant compositionand combination and process. United States Patent #6319431 10. Levchik, S.V.; Weil, E.D. Thermal decomposition, combustion and flame-retardancy of epoxy resins—A review of the recent literature. Polym. Int. 2004, 53, 1901-1929 | | 19-21 |
| | Authors: | S. C. Sahoo, A. Sill., C. N Pandey | |
| | Paper Title: | "A Natural Additive Approaches to Enhance the Performance of Formaldehyde Based Adhesive for Plywood Manufacturing" | |
| | <p>Abstract: There is a need for additive that enhance the different properties like rheological , tackiness etc. Of the adhesive mix during plywood manufacturing bu using non formaldehyde based adhesive. The present study relates the efficacy study of the natural additive, which is basically fully based on starch and protein available from renewable sources containing a natural tackifier and viscosity enhancer. The adhesive is based predominately on a natural product for example protein, starch based natural material, lignin etc. Thus complementing the use of a lignocelluloses as the primary material. The additive was analysed for physical and chemical properties as per is : 1508 Like PH ash content. Moisture, protein content etc, in order to evaluate the suitability of bond quality and other properties during manufacture of Plywood. 12mm thickness plywood were manufactured with non Formaldehyde adhesive using natural additive at different concentration and evaluated different physical, che3micals properties and board manufacturing condition. Data reveals that additive of three to four percent</p> | | |

| | | | | | | |
|---------------------|---|-----------------|---|---------------------|--|-------|
| 6. | <p>concentration gave satisfactory results in terms of board quality, rheological properties and mechanical properties etc. Five to six percent additive concentration gave excellent result. Addition of higher percent gave unsatisfactory results for manufacturing of ply boards.</p> <p>Keywords: Additive, starch and protein, natural product, rheological properties and mechanical properties, natural tackifier and viscosity enhancer.</p> <p>References:</p> <ol style="list-style-type: none">1. Bureau of Indian Standards IS 460 – 1962. Specification for test sieves.2. Bureau of Indian Standards IS 1508 – 1972. “Specification for extenders for use in synthetic resin adhesive (urea formaldehyde) for plywood.”3. Bureau of Indian Standards IS 3944 - 1982. “Method for determination of flow time by use of flow cups.”4. Bureau of Indian Standards IS 848 – 1992. “Specification for synthetic resin adhesives (Phenolic and aminoplastic)”5. Mohandas K.K., Narayanaprasad T.R., Rangaraju T.S., Zoolagud S.S. 1997. “Study on the suitability of Deoiled Soyabean Flour and Jatropa Seed Cake Flour as Extenders for UF and PF Resin adhesives for bonding MR and BWR grades of plywood.” IPIRTI Research Report no. 97.6. Raghunath Rao D.M., Zoolagud S.S. 1993. “Study on the effect of Proteineous Starch based fillers and extenders on phenolic resin bonded plywood.” . IPIRTI Research Report no. 637. Mohan Das K.K., Narayana Prasad T.R., Zoolagud S.S., 1993.” Evaluation of commonly used extenders for UF resin adhesives in the plywood industry.” IPIRTI Research Report no. 62.8. S.K.Nath, ”Plywood Manufacturing technology” DVS Publication, Aug-2009 .9. N. S. A. Derkyi 1, D. Seliyere 1, N. A. Darliwa.2 and J. G. Yartey.1” Effect Of Cassava Flour As Urea-Formaldehyde Adhesive extender On The Bonding Strength Of Plywood” Ghana Journal of Forestry, Vol. 23 & 24, 200810. Sekyere, D., J. DeGraft-Yartey, N.S.A. Derkyi, N.A. Darkwa optimization Of Industrial Trial: The Use Of cassava Flour As Extender In Plywood adhesive Mix For plywood manufacture, Forestry Research Institute of Ghana (FORIG), Kumasi, March, 200411. Terry Sellers, Jr, George D. Miller, Wade Smith Tool wear properties of five extender/fillers in adhesive mixes for plywood, Forest Products Journal Vol. 55, No. 312. Chan, F. D. and Dionglay, M. S. P. (1996) Utilization of Giant Ipil-Ipil Seed Flour as Plywood Glue Extender, FPRDI Journal, 22. (2):1-14.13. Shields, J. (1984) Adhesives Handbook, 3rd Edition, Butterworths, London.14. Skeist, I. (1977). Handbook of Adhesives 2nd ed. Van Nostrand Reinhold Co., NY. | 22-28 | | | | |
| 7. | <table><tr><td>Authors:</td><td>K. Kanthamma, K. Maheswari, G. N. Kodandaramaiah</td></tr><tr><td>Paper Title:</td><td>Image Steganography using Polynomials</td></tr></table> <p>Abstract: Steganography is the art of hiding secret messages inside other messages as until recently had been the poor cousin of cryptography, to communicate privately in open channel. The disadvantage of cryptography is that cryptanalysis’s will break the secret key and secret message will be revealed .Steganography serves as a better way of securing message than cryptography. Steganography gained importance in the past few years due to the increasing need for providing secrecy in an open environment like internet. Many techniques are used to secure information such as cryptography that aims to scramble the information sent and make it unreadable while steganography is used to conceal the information so that no one can sense its existence. There have been many techniques for hiding messages in images in such a manner that the alterations made to the image are perceptually indiscernible. A new steganography encoding scheme which separates the colour channels of the windows bit map images and then hides the images randomly using polynomials in the LSB of any colour component of choose pixel. The polynomials may be of any type with constants and variables. a new steganographic encoding scheme, randomly hide messages in the LSB of any component of the chosen pixel using polynomial. If polynomial is used, hacker needs to predict more than one number. i.e. all coefficients of polynomial correctly to decode and probability of finding all right coefficients correctly is less compared to predicting single seed as in case random generator. So the strength of the stealth is increased by choosing higher dimensional polynomial.</p> <p>Keywords: Steganography, messages, cryptography, polynomial, techniques.</p> <p>References:</p> <ol style="list-style-type: none">1. Image Steganography using Polynomials and Covert Communications in Open Systems EnvironmentA. Siva Sankar, T. Jayachandra Prasad and M.N. Giriprasad published in International Journal of Software Engineering. Volume 1, Number 1 (2010), pp. 87—94 © International Research Publication House http://www.irphouse.com2. An Overview Of Image SteganographyT. Morkel , J.H.P. Eloff , M.S. Olivier published byInformation and Computer Security Architecture (ICSA) Research GroupDepartment of Computer Science3. Lsb Based Image Steganography Using Polynomials And Covert Communications In Open Systems Environment For DrmbyA Siva Sankar T Jayachandra Prasad M N Giriprasad published in International Conference and Workshop on Emerging Trends in Technology (ICWET 2011) – TCET, Mumbai, India.4. Cryptography (Security By Des) By M.RAJ KUMAR and M.SYEDALI5. Murray, A.H., and R.W Burchfiled (eds.), The Oxford English Dictionary, Oxford, England: Clarendon Press, 1933.6. J. Bright, Jeremiah (AB; New York 1965) 209; R.K. Harrison, Jeremiah and Lamentations (Winona Lake 1973)7. D. Kahn, 'The History of Steganography' in Anderson, pp. 1-5.8. http://www.trai.gov.in/WriteReadData/traireupload/PressReleases/671/pr21apr09no38.pdf9. Oosterwijk, Herman and Paul T. Gihring; DICOM Basics, 3rd ed.; OTech, Inc., Aubrey, TX;200210. D. Kahn, 'The Codebreakers - The Story of Secret Writing', Scribner, New York, New York, U.S.A., 1996. ISBN 0-684-83130-9.11. G.J. Simmons , "The prisoners' problem and the subliminal channel" , Advances in Cryptology : Proceedings of CRYPTO 83, (ed. D. Chaum), Plenum , New York , 1984,pp.51-67.12. NF Maxemchuk, Electronic Document Distribution", AT & T Technical Journal v 73 no 5 (Sep/Oct 94) pp 73 - 8013. A. Westfeld and A. Pfitzmann, "Attacks on Steganographic System", Proc. Information Hiding-3 Int'l Workshop in Information Hiding, Springer- Verlag, 1999, pp. 61-76. | Authors: | K. Kanthamma, K. Maheswari, G. N. Kodandaramaiah | Paper Title: | Image Steganography using Polynomials | 29-33 |
| Authors: | K. Kanthamma, K. Maheswari, G. N. Kodandaramaiah | | | | | |
| Paper Title: | Image Steganography using Polynomials | | | | | |

| | | |
|----|---|--|
| | 14. JijjuA.Mathew& Prof. Gurmit Singh, "Steganography and Covert Communications in open systemsenvironment", 2009 IEEE, pp.847-849. | |
| | 15. K.Sukumar, et.al., " Multi-Image –Watermarking Scheme based on Framelet and SVD", 2009 IEEE, pp. 379-388 . | |
| | Authors: | Harmeet Kaur, Sonal Chawla |
| | Paper Title: | Web Data Mining: Exploring Hidden Patterns, its Types and Web Content Mining Techniques and Tools |
| 8. | <p>Abstract: The abundance of web data has made it an utmost important source for Web data mining. Web data mining takes WWW data as input and after analysis and discovery, the output i.e. extracted information is used by an organisation. It helps the organisation in taking simpatico decisions for better survival in future. The objective of this paper is four folds. Firstly this paper gives a basic introduction of Web data mining. Secondly, it explains Web data mining categories, thirdly it discusses Web content mining techniques and tools in brief and finally a comparison between various tools available for Web Content Mining.</p> <p>Keywords: Web Content Mining, Structured data, unstructured data.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Johannes Furnkranz, Web Structure Mining Exploiting the Graph Structure of the World Wide Web. 2. Jaideep Srivastava, Robert Cooley, Mukund Deshpandey, Pag Ning Tan, Web Usage Mining: Discovery and Application of Usage patterns from Web Data, ACM SIGKDD Explorations Newsletter, January 2000, Volume 1 Issue. 3. Faustina Johnson & Santosh Kumar Gupta, Web Content Mining Techniques: A Survey, International Journal of Computer Applications (0975 – 888) Volume 47– No.11, June 2012 44 4. Magdalini Eirinaki, Web Mining: A Roadmap. 5. Mining Semi-Structured Data Theoretical and Experimental Aspects of Pattern Evaluation E.H. de Graaf 6. Alin Deutsch, Mary Fernandez, Dan Suciu, Storing Semi-structured Data with STORED 7. Govind Murari, Upadhyay, Kanika Dhingra, Web Content Mining: Its Techniques and Uses, Volume 3, Issue 11, November 2013 ISSN:2277 128X 8. www.fminer.com 9. www.screen-scraper.com 10. www.rapidminer.com 11. web content extractor help 12. www.Mozenda.com | 34-36 |
| | Authors: | Md. Morshedul Arefin, Md. Ekramul Hamid |
| | Paper Title: | A Comparative Study on Unimodal and Multimodal Biometric Recognition |
| 9. | <p>Abstract: Biometrics is one of the recent trends in security, which is mainly used for verification and recognition systems. By using biometrics we confirm a particular person's claimed identity based on particular person's physiological or behavioral characteristics such as fingerprint, face or voice etc. Most biometric systems deployed in real-world applications are unimodal, such as they use a single source of information for authentication (e.g., single fingerprint, face, voice etc.). Some of the limitations imposed by unimodal biometric systems can be overcome by including multiple sources of information for establishing identity. In this paper, it is shown that fingerprint and face recognition can form a good combination for a multimodal biometric system.</p> <p>Keywords: Biometrics, Identification, Verification, Features, Fusion.</p> <p>References:</p> <ol style="list-style-type: none"> 1. E. d. Os, H. Jongbloed, A. Stijssiger, and L. Boves, "Speaker verification as a user-friendly access for the visually impaired," in Proc. Eur. Conf. Speech Technology, Budapest, Hungary, 1999, pp. 1263–1266. 2. A. Eriksson and P. Wretling, "How flexible is the human voice? A case study of mimicry," in Proc. Eur. Conf. Speech Technology, Rhodes, 1997, pp. 1043–1046. 3. W. R. Harrison, Suspect Documents, Their Scientific Examination. Chicago, IL: Nelson-Hall, 1981. 4. T. Matsumoto, H. Matsumoto, K. Yamada, and S. Hoshino, "Impact of artificial gummy fingers on fingerprint systems," Proc. SPIE, vol. 4677, pp. 275–289, Feb. 2002. 5. L. Hong, A. K. Jain, and S. Pankanti, "Can multibiometrics improve performance?," in Proc. AutoID'99, Summit, NJ, Oct. 1999, pp. 59–64. 6. L. Hong and A. K. Jain, "Integrating faces and fingerprints for personal identification," IEEE Trans. Pattern Anal. Machine Intell., vol. 20, pp. 1295–1307, Dec. 1998. 7. L. I. Kuncheva, C. J. Whitaker, C. A. Shipp, and R. P. W. Duin, "Is independence good for combining classifiers?," in Proc. Int. Conf. Pattern Recognition (ICPR), vol. 2, Barcelona, Spain, 2001, pp. 168–171. 8. Y. A. Zuev and S. Ivanon, "The voting as a way to increase the decision reliability," in Proc. Foundations of Information/Decision Fusion with Applications to Engineering Problems, Washington, DC, Aug. 1996, pp. 206–210. 9. R. Brunelli and D. Falavigna, "Person identification using multiple cues," IEEE Trans. Pattern Anal. Machine Intell., vol. 12, pp. 955–966, Oct. 1995. 10. E. S. Bigun, J. Bigun, B. Duc, and S. Fischer, "Expert conciliation for multimodal person authentication systems using bayesian statistics," in Proc. Int. Conf. Audio and Video-Based Biometric Person Authentication (AVBPA), Crans-Montana, Switzerland, Mar. 1997, pp. 291–300. 11. R. W. Frischholz and U. Dieckmann, "Bioid: A multimodal biometric identification system," IEEE Comput., vol. 33, pp. 64–68, 2000. 12. T. K. Ho, J. J. Hull, and S. N. Srihari, "Decision combination in multiple classifier systems," IEEE Trans. Pattern Anal. Machine Intell., vol. 16, pp. 66–75, Jan. 1994. 13. J. Kittler, M. Hatef, R. P. W. Duin, and J. Matas, "On combining classifiers," IEEE Trans. Pattern Anal. Machine Intell., vol. 20, pp. 226–239, Mar. 1998. 14. S. Prabhakar and A. K. Jain, "Decision-level fusion in fingerprint verification," Pattern Recognit., vol. 35, no. 4, pp. 861–874, 2002. 15. U. Dieckmann, P. Plankensteiner, and T. Wagner, "Sesam: A biometric person identification system using sensor fusion," Pattern Recognit. Lett., vol. 18, no. 9, pp. 827–833, 1997. | 37-45 |

| | | | | | | |
|---|--|--------------------------|---|--------------|---|--|
| | <div>16. S. Ben-Yacoub, Y. Abdeljaoued, and E. Mayoraz, "Fusion of Face and Speech Data for Person Identity Verification," IDIAP, Martigny, Switzerland, Res. Paper IDIAP-RR 99-03, 1999.</div> <div>17. D. Maio, D. Maltoni, R. Cappelli, J. L. Wayman, and A. K. Jain, "FVC2002: Fingerprint verification competition," in Proc. Int. Conf. Pattern Recognition (ICPR), Quebec City, QC, Canada, Aug. 2002, pp. 744-747.</div> <div>18. J. L. Wayman, "Fundamentals of biometric authentication technologies," Int. J. Image Graphics, vol. 1, no. 1, pp. 93-113, 2001.</div> <div>19. (2002) Best Practices in Testing and Reporting Performance of Biometric Devices, Version 2.01. U. K. Biometric Work Group (UKBWG). [Online]. Available: http://www.cesg.gov.uk/technology/biometrics/</div> <div>20. R. Cappelli, D. Maio, and D. Maltoni, "Indexing fingerprint databases for efficient 1:N matching," in Proc. 6th Int. Conf. Control Automation Robotics and Vision, 2000.</div> <div>21. M. Golfarelli, D. Maio, and D. Maltoni, "On the error-reject tradeoff in biometric verification systems," IEEE Trans. Pattern Anal. Machine Intell., vol. 19, pp. 786-796, July 1997.</div> <div>22. A. K. Jain and A. Ross, "Learning user-specific parameters in a multibiometric system," in Proc. Int. Conf. Image Processing (ICIP), Rochester, NY, Sept. 2002, pp. 57-60.</div> <div>23. J. Clark and A. Yuille, Data Fusion for Sensory Information Processing Systems. Boston, MA: Kluwer, 1990.</div> <div>24. D. Zhang and W. Shu, "Two novel characteristic in palmprint verification: Datum point invariance and line feature matching," Pattern Recognit., vol. 32, no. 4, pp. 691-702, 1999.</div> <div>25. A. Kumar, D. C. Wong, H. C. Shen, and A. K. Jain, "Personal verification using palmprint and hand geometry biometric," presented at the 4th Int. Conf. Audio- and Video-based Biometric Person Authentication, Guildford, U.K., June 9-11, 2003.</div> <div>26. P. J. Philips, P. Grother, R. J.Micheals, D. M. Blackburn, E. Tabassi, and J. M. Bone. FRVT 2002: Overview and Summary. [Online]. Available: http://www.frvt.org/FRVT2002/documents.htm</div> | | | | | |
| 10. | <table><tr><td>Authors:</td><td>Akashdeep Singh</td></tr><tr><td>Paper Title:</td><td>Back Operated Wheelchair</td></tr></table> | Authors: | Akashdeep Singh | Paper Title: | Back Operated Wheelchair | |
| | Authors: | Akashdeep Singh | | | | |
| | Paper Title: | Back Operated Wheelchair | | | | |
| <p>Abstract: Our project aims at developing a low cost mobility solution for paraplegics, which is equally good for use by persons with disabled arms and hands. Today many disabled persons are dependent on wheelchairs for their mobility. For instance, in Netherlands, approximately 82 percent of individuals with spinal cord injury (SCI), admitted for inpatient rehabilitation, are wheelchair users (Post and others 1997). [et al Riemer JK Vegter,2010]. Mobility aids currently used in developing nations are not able to fully meet the user’s requirements. Various automated wheelchairs available today are designed to satisfy the needs of Paraplegics but not efficient and cost effective solutions up till now have been developed to cater for the needs of the Tetraplegics (i.e. people with all four limbs disabled). In case of Paraplegics also the situation is not very favorable. Thus, our design of a special automated wheelchair operated by back only (BOW) is an attempt to help the tetraplegics around the globe thus enabling them to move around and commute from one place to another without any assistance from anyone. Furthermore, another factor which has been taken into consideration for designing is that the design be very easy to manufacture involving simple mechanisms and be affordable by all needy patients.</p> <p>Keywords: Affordable, automatic, Back operated, physically disabled, tetraplegics, wheelchair.</p> <p>References:</p> <div>1. http://www.draftwheelchairs.com/faq/help-with-tyre-and-wheel-sizing/</div> <div>2. http://www.sportaid.com/sort-by-size/</div> <div>3. http://www.sportaid.com/wheelchair-wheel-bearings/</div> <div>4. http://www.leadertelegram.com/local_news/story/article_950f4388-2483-53c3-b903-635c69c51a3e.html</div> <div>5. http://www.stimme.de/deutschland-welt/panorama/tv-tipp/tv/dertv-tag/TV-2009-11-30-RTL-II-22-15-00-Der-Mann-ohne-Arme-und-Beine;art30405,1682137</div> <div>6. http://www.dailyindependent.com/local/x1614271188/Woman-seeks-funds-for-specially-equipped-van</div> <div>7. http://www.thestar.com.my/News/Nation/2013/09/17/Vujicic-gave-Nur-Damias-mother-hope.aspx/</div> <div>8. http://en.wikipedia.org/wiki/Tetra-amelia_syndrome</div> <div>9. http://en.wikipedia.org/wiki/Nick_Vujicic</div> <div>10. http://www.dailymail.co.uk/news/article-2204318/Pictured-Bomb-disposal-expert-lost-arms-legs-IED-blast-documents-recovery-online--sets-MASSIVE-fundraiser.html</div> <div>11. http://www.dailymail.co.uk/news/article-2150933/The-shocking-cost-war-Afghanistan-Iraq-veterans-damaged-generation-HALF-seeking-disability-benefits.html</div> <div>12. http://www.lbhealthcare.co.uk/paralysed-woman-swims-at-lbhealthcare-for-spinal-injuries/</div> <div>13. http://www.dailymail.co.uk/news/article-2522458/Bizarre-moment-prankster-NO-LEGS-terrifies-unsuspecting-shopper-crawling-dressed-zombie.html</div> <div>14. http://www.dailymail.co.uk/femail/article-2284460/Victim-landmine-Afghanistan-Corporal-Andy-Reids-battle-walk-propose-girlfriend.html</div> <div>15. http://www.mirror.co.uk/news/uk-news/boy-who-lost-all-his-limbs-to-meningitis-98645</div> <div>16. http://www.worldvision.com.au/Issues/Emergencies/PastEmergencies/HaitiEarthquake/HealingThroughHelping.aspx</div> <div>17. http://www.fourpowerfour.com/characteristic-of-4x4-wheelchair-4power4.asp</div> <div>18. http://www.un.org/esa/socdev/enable/designm/AD5-02.htm</div> <div>19. http://www.thekingsferry.co.uk/about-us/serving-disabled-customers</div> <div>20. http://www.naffainc.com/x/CodeBuddy5h98/Tables/Disabled-Acess%20Graphics%20Table_text.htm</div> <div>21. http://www.madcad.com/library/5266/54762/</div> <div>22. http://www.1800wheelchair.com/asp/wheelchair-buying-guide.aspx</div> | 46-50 | | | | | |
| | <table><tr><td>Authors:</td><td>Asri Laksmi Riani, Hunik Sri Runing Sawitri</td></tr><tr><td>Paper Title:</td><td>Problems and Prospects of Entrepreneurship on Learning Management in Batik Industry</td></tr></table> | Authors: | Asri Laksmi Riani, Hunik Sri Runing Sawitri | Paper Title: | Problems and Prospects of Entrepreneurship on Learning Management in Batik Industry | |
| Authors: | Asri Laksmi Riani, Hunik Sri Runing Sawitri | | | | | |
| Paper Title: | Problems and Prospects of Entrepreneurship on Learning Management in Batik Industry | | | | | |
| | <p>Abstract: The purpose of this study is to determine: 1. Benefits of workplace training programs, 2. Issues that affect participation in training, 3. A motivator in doing business, 4. The factors that affect business activities development, 5. The importance of learning methods to develop qualified entrepreneurship. This research was conducted on the batik entrepreneurs in Surakarta, Karanganyar, and Sragen. The sampling method is non-probability sampling, with convenience sampling technique on 65 respondents. The results of this study indicate that there are tendencies that: 1. Maiority of</p> | | | | | |

| | | |
|------------|--|--------------|
| | <p>respondents will apply to learning outcomes about entrepreneurial skills in the workplace. 2. Majority of respondents want to participate actively in the training. 3. Majority of respondents feel that they get more enlightenment in the training. 4. Factors that affect business activities development, the majority of respondents feel that they see the availability of labor, raw materials, and capital. 5. In terms of teaching methods to develop qualified entrepreneurship, most respondents respectively stated that they prioritize some methods such as: case studies, role plays, business games, counseling, and lectures / discussions.</p> | |
| 11. | <p>Keywords: Business motivator, learning methods, participation, training program.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Fayolle (2006) Fayolle, A., Gailly, B., and Lassas-Clerc, N. (2006). Assessing the impact of entrepreneurship education programmes: a new methodology. <i>Journal of European Industrial Training</i> Vol. 30 No. 9, 2006, pp. 701-720. 2. Mwasalwiba, (2010) "Entrepreneurship education: a review of its objectives, teaching methods, and impact indicators", <i>Education + Training</i>, Vol. 52 Iss: 1, pp.20 - 47 3. Cruz, N.M., Escudero, A.I.L., dan Leitao, F.S. (2009). The effect of entrepreneurship education programmes on satisfaction with innovation behaviour and performance. <i>Journal of European Industrial Training</i>. Vol. 33 No. 3, 2009, pp. 198-214. 4. Popadiuk, Silvio, &Choo, Chun Wei (2006). "Innovation and knowledge creation: How are these concepts related?". <i>International Journal of Information Management</i>. Vol. 26. Pp. 302–312. 5. Wang, C. L. and Ahmed, P. K. (2004). The development and validation of the organisational innovativeness construct using confirmatory factor analysis. <i>European Journal of Innovation Management</i>, 7(4):303-313. 6. Ireland and Webb (2007) <i>Journal of Management</i>, Vol. 33 No. 6, December 2007 891-927 7. Lumpkin, Dess.1996. Clarifying the Entrepreneurial Orientation Construct & Linking It to Performance. <i>The Academy of Management Review</i>. Vol.21, No.1, pp.135-172. | 51-54 |