

International Journal of Inventive

Engineering and Sciences

ISSN : 2319- 9598

Website: www.ijies.org

Volume-2 Issue-5, April 2014

Published by:

Blue Eyes Intelligence Engineering and Sciences Publication Pvt.



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. Himani Sharma

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

Prof.(Dr.) Anuranjan Misra

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

Chief Advisory Board

Prof. (Dr.) Hamid Saremi

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

Dr. Uma Shanker

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

Dr. Rama Shanker

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

Dr. Vinita Kumari

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

Dr. Kapil Kumar Bansal

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

Dr. Deepak Garg

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

Dr. Vijay Anant Athavale

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

Dr. T.C. Manjunath

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

Dr. Kosta Yogeshwar Prasad

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

Dr. Dinesh Varshney

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

Dr. P. Dananjayan

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

Dr. Sadhana Vishwakarma

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

Dr. Kamal Mehta

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

Dr. CheeFai Tan

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

Dr. Suresh Babu Perli

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

Dr. Binod Kumar

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

Dr. Chiladze George

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

Dr. Kavita Khare

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

Dr. C. Saravanan

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

Dr. S. Saravanan

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

Dr. Amit Kumar Garg

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

Dr. T.C.Manjunath

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

Dr. P. Dananjayan

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

Dr. Kamal K Mehta

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

Dr. Rajiv Srivastava

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

Dr. Chakunta Venkata Guru Rao

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

Dr. Anuranjan Misra

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

Dr. Robert Brian Smith

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

Dr. Saber Mohamed Abd-Allah

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

Dr. Himani Sharma

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

Dr. Sahab Singh

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

Dr. Umesh Kumar

Principal: Govt Women Poly, Ranchi, India

Dr. Syed Zaheer Hasan

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

Dr. Jaswant Singh Bhomrah

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

Technical Advisory Board

Dr. Mohd. Husain

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

Dr. T. Jayanthi

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

Dr. Umesh A.S.

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

Dr. B. Kanagasabapathi

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

Dr. C.B. Gupta

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

Dr. Sunandan Bhunia

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

Dr. Jaydeb Bhaumik

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

Dr. Rajesh Das

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

Dr. Mrutyunjaya Panda

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

Dr. Mohd. Nazri Ismail

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

Dr. Haw Su Cheng

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

Dr. Hossein Rajabalipour Cheshmehgaz

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

Dr. Sudhinder Singh Chowhan

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

Dr. Neeta Sharma

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

Dr. Ashish Rastogi

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

Dr. Santosh Kumar Nanda

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

Dr. Hai Shanker Hota

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

Dr. Sunil Kumar Singla

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

Dr. A. K. Verma

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

Dr. Durgesh Mishra

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

Dr. Xiaoguang Yue

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

Dr. Veronica Mc Gowan

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

Dr. Mohd. Ali Hussain

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

Dr. Mohd. Nazri Ismail

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

Dr. Sunil Mishra

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

Dr. Labib Francis Gergis Rofaiel

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

Dr. Pavol Tanuska

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

Dr. VS Giridhar Akula

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

Dr. S. Satyanarayana

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

Dr. Bhupendra Kumar Sharma

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

Dr. Praveen Agarwal

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

Dr. Manoj Kumar

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

Dr. Shaikh Abdul Hannan

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

Dr. K.M. Pandey

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

Prof. Pranav Parashar

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

Dr. Biswajit Chakraborty

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

Dr. D.V. Ashoka

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

Dr. Sasidhar Babu Suvanam

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

Dr. C. Venkatesh

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

Dr. Nilay Khare

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

Dr. Sandra De Iaco

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

Dr. Yaduvir Singh

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

Dr. Angela Amphawan

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

Dr. Ashwini Kumar Arya

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

Dr. Yash Pal Singh

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

Dr. Ashish Jain

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

Dr. Abhay Saxena

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

Dr. Judy. M.V

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

Dr. Sangkyun Kim

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

Dr. Sanjay M. Gulhane

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

Dr. K.K. Thyagarajan

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

Dr. P. Subashini

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

Dr. G. Srinivasrao

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

Dr. Rajesh Verma

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

Dr. Pawan Kumar Shukla

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

Dr. U C Srivastava

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

Dr. Reena Dadhich

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

Dr. Aashis. S. Roy

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

Dr. Sudhir Nigam

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

Dr. S. Senthil Kumar

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

Dr. Gufran Ahmad Ansari

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

Dr. R. Navaneetha krishnan

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

Dr. Hossein Rajabalipour Cheshmejjaz

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

Dr. Veronica McGowan

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

Dr. Sanjay Sharma

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

Dr. Taghreed Hashim Al-Noor

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

Dr. Madhumita Dash

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

Dr. Anita Sagadevan Ethiraj

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

Dr. Sibasis Acharya

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

Dr. Neelam Ruhil

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

Dr. Faizullah Mahar

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

Dr. K. Selvaraju

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

Dr. M. K. Bhanarkar

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

Dr. Sanjay Hari Sawant

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

Dr. Arindam Ghosal

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

Dr. M. Chithirai Pon Selvan

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

Dr. S. Sambhu Prasad

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

Dr. Muhammad Attique Khan Shahid

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

Dr. Kuldeep Pareta

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

Dr. Th. Kiranbala Devi

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

Dr. Nirmala Mungamuru

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

Dr. Srilalitha Girija Kumari Sagi

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

Dr. Vishnu Narayan Mishra

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

Dr. Yash Pal Singh

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

Dr. Sripada Rama Sree

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

Dr. Rustom Mamlook

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

Managing Editor

Mr. Jitendra Kumar Sen

International Journal of Advanced Engineering and Nano Technology (IJAENT)

Editorial Board

Dr. Vikas Maheshwari

Associate Professor, Department of Electrical Communication Engineering, Amity University Madhya-Pradesh Gwalior, M.P., India

Dr. Sudhakara A

Associate Professor, Department of Chemistry, Jain Institute of Technology Davanagere, Karnataka, India

Dr. Jammi Ashok

Associate Professor, Department of Electrical and Computer Engineering, Hawassa University, Hawassa.(East Africa)

Dr. Mohamed Ashabrawy

Associate Professor, Department of Computer Science, Salman bin Abdulaziz University Kingdom, Saudi Arabia

Dr. Omer Muhammad Ayoub

Associate Professor, Department of Computer Science, Punjab University Affected Center Abdullah Sulayman Road, Al-Fayyaz, Jeddah, KSA Saudi Arabia

Dr. M. Seenivasan

Associate Professor, Department of Mathematics, Annamalai University Annamalainagar, Tamil Nadu, India

Dr. S.V.G.V.A. Prasad

Associate Professor, Department of Physics, Ideal College of Arts & Sciences, Kakinada, A.P, India.

Dr. S. Omkumar

Associate Professor, Department of Electronics and Communication Engineering, SCSVMV University, Enathur, Kanchipuram – 631 561. Tamilnadu, India.

Dr. Yousef FARHAOUI

Associate Professor, Department of Computer Science, Faculty of Sciences and Technic, Moulay Ismail University, B.P 509, Boutalamine, Errachidia, Morocco.

Dr. Gutta Sridevi

Associate Professor, Department of Computer Science & Engineering, K L University, Vaddeswaram, Guntur (DT) Andhra Pradesh. India.

Dr. Debmalya Bhattacharya

Associate Professor, Department of Electronics & Communication Engineering, University of Technology & Management, Bawri Mansion, Dhankheti, Shillong-793003, Meghalaya, India.

Dr. K. Harinadha Reddy

Associate Professor, Department of Electrical and Electronics Engineering, L B R College of Engineering, Mylavaram, Krishna District, Andhra Pradesh State - 5 21 230, India.

Dr. C. Gajendran

Associate Professor, Department of Civil Engineering, School of Civil Engineering, Karunya Nagar, Karunya University, Coimbatore – 641114, Tamil Nadu, India.

Dr. Dibya Prakash Rai

Assistant Professor, Department of Physics, College of Aizawl, Pachhunga University, Mizoram, India.

Dr. Sreenivasa Reddy

Associate Professor, Department of Chemistry, Sri Krishnadevaraya University, Anantapur-515003, A.P., India.

Dr. P. K. Dhal

Associate Professor, Department of Electrical and Electronics Engineering, Vel Tech, Dr. RR & Dr. SR Technical University, Chennai, India.

Dr. M. A. Ashabrawy

Associate Professor, Department of Computer Science, Atomic Energy Authority, Salman bin Abdulaziz University, Al Kharj Saudi Arabia.

Dr. K. Meenakshi Sundaram

Professor & Head, Department of Computer Science, Agnel Institute of Technology and Design, Assagao - Bardez, Goa. India.

Dr. Persis Voola

Associate Professor, Department of Computer Science and Engineering, Adikavi Nannaya University, Rajah Narendra Nagar, Rajahmundry-533296 Andhra Pradesh, India.

Dr. Abhijit Banerjee

Associate Professor, Department of Electronics and Instrumentation Engineering, Academy of Technology, Hooghly, Grand Trunk Rd, Adisaptagram, Aedconagar, West Bengal, India.

Dr. D. Amaranatha Reddy

Associate Professor, Department of Chemistry, Pusan National University, Busan, South Korea.

Dr. A. Heidari

Associate Professor, Department of Chemistry, Postdoctoral Research Fellow, California South University (CSU), Irvine, California, USA

Dr. Ashwani Kumar Aggarwal

Assistant Professor, Department of Electrical and Instrumentation Engineering, Sant Longowal Institute of Engineering and Technology, Longowal, Punjab, India.

Dr. P. Srinivas

Assistant Professor, Department of Electrical Engineering, University College of Engineering Osmania University, Hyderabad-500007, Telangana, India.

Dr. Sandeep Chettri

DST-SERB, Young Scientist, Department of Physics, Mizoram University, Tanhril, Aizawl, Mizoram 796004, India.

Dr. Elsanosy M. Elamin

Assistant Professor, Department of Electrical and Electronic Engineering, Faculty of Engineering, University of Kordofan B.O.Box: 160 Elobeid, (Sudan). North Africa.

Dr. Porag Kalita

Professor & Head, Department of Automobile Engineering, Jorhat, Assam, India.

Dr. T. A. Ashok Kumar

Associate Professor, Department of Computer Science, Christ University, Bengaluru, Karnataka, India.

Dr. Malini M Patil

Associate Professor, Department of Information Science and Engineering, JSS Academy of Technical Education, JSS Campus, Bangalore-560060, Karnataka, India.

Dr. V. Selvan

Associate Professor, Department of Civil Engineering, Sri Ramakrishna Engineering College, Vattamalaipalayam, Coimbatore, Tamil Nadu, India.

Dr. Syed Umar

Associate Professor, Department of Computer Science and Engineering, Koneru Lakshmaiah University, Vaddeswaram, Guntur, Andhra Pradesh, India.

S. No	Volume-2 Issue-5, April 2014, ISSN: 2319-9598 (Online) Published By: Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd.		Page No.	
1.	Authors:	Vamsi Krishna Pelluru		
	Paper Title:	Application Detection System		
	<p>Abstract: Across the Globe companies are finding ways to maximize their productivity with infrastructure and Resources, Application Detection system helps companies achieve it, it also helps administrators in identifying which are the applications that are more commonly used across the corporate, those applications can be blocked to use from the networks, Most of the employees spent considerable time in office on Browsing Social Networking sites eg; Face Book, Orkut, LinkedIn etc, Application Detection system helps administrators in identifying the Source machines from which these requests arise, it generates the logs with the source machine IP, Application name , its pattern etc, based on the pattern the corresponding signature will be triggered and it will either block or allow the application based on the configuration provided to it.</p> <p>Keywords: Application detection System, Signatures.</p> <p>References:</p> <ol style="list-style-type: none"> 1. http://www.pcworld.com/article/249137/what_is_deep_packet_inspection_.html 2. http://www.deeppacketinspection.ca/ 		1-3	
Authors:	Vivek Hanumante, Rubi Debnath, Disha Bhattacharjee, Deepti Tripathi, Sahadev Roy			
Paper Title:	English Text to Multilingual Speech Translator Using Android			
2.	<p>Abstract: This paper aims at providing design and development solution of an Android application whose objective is to provide a solution to overcome the barrier of languages by implementing text to speech conversion in different languages. The Android application developed text to speech conversion to facilitate the translation of English language text into speech output in different languages. We have also proposed few improvements which can further advance this system to include more target audiences so as to make it more beneficial and useful. The proposed English Text to Multilingual Speech Translator using Android (T2MSTA) aims at providing assistance to the people lacking the power of speech or non-native speakers like people who do not share a common language.</p> <p>Keywords: Android, T2MSTA, Text to Speech conversion, Intent, MATLAB.</p> <p>References:</p> <ol style="list-style-type: none"> 1. El-Imam, Y.A.; Banat, K., "Text-to-speech conversion on a personal computer," Micro, IEEE , vol.10, no.4, pp.62,74, Aug. 1990 2. O'Malley, M.H., "Text-to-speech conversion technology," Computer, vol.23, no.8, pp.17-23, Aug. 1990. 3. Santos, J.; Nombela, J., "Text-to-speech conversion in Spanish a complete rule-based synthesis system," Acoustics, Speech, and Signal Processing, IEEE International Conference on ICASSP '82. , vol.7, no., pp.1593-1596, May 1982. 4. Sadeque, F.Y.; Yasar, S.; Islam, M.M., "Bangla text to speech conversion: A syllabic unit selection approach," International Conference on Informatics, Electronics & Vision (ICIEV), 2013, pp.1-6, 17-18 May 2013. 5. Bothe, K.; Joachim, S., "Interactive tool-based production of multilingual teaching and learning materials," Fifth IEEE International Conference on Advanced Learning Technologies, ICALT, pp.516,518, 5-8 July 2005. 6. Nowak, G.; Grabowski, S.; Draus, C.; Zarebski, D.; Bieniecki, W., "Designing a computer-assisted translation system for multi-lingual catalogue and advertising brochure translations," Proceedings of VIth International Conference on Perspective Technologies and Methods in MEMS Design (MEMSTECH), pp.175,180, 20-23 April 2010. 7. Linsi Xia; Yamashita, N.; Ishida, Toru, "Analysis on Multilingual Discussion for Wikipedia Translation," Second International Conference on Culture and Computing (Culture Computing), pp.104, 109, 20-22 Oct. 2011. 8. Yuqing Gao; Bowen Zhou; Liang Gu; Sarikaya, R.; Hong-Kwang Kuo; Rosti, A.-V.I.; Afify, M.; Weihong Zhu, "IBM Mastor: Multilingual Automatic Speech-To-Speech Translator," ICASSP 2006 Proceedings. 2006 IEEE International Conference on Acoustics, Speech and Signal Processing, 2006. , vol.5, 14-19 May 2006. 9. Liang Gu; Yuqing Gao; Liu, F.-H.; Picheny, Michael, "Concept-based speech-to-speech translation using maximum entropy models for statistical natural concept generation," Processing, IEEE Transactions on Audio, Speech, and Language , vol.14, no.2, pp.377-392, March 2006. 10. Evandro Franzen1 and Dante Augusto Couto Barone, "Automatic Discovery of Brazilian Portuguese Letter to Phoneme Conversion Rules through Genetic Programming", Springer-Verlag Berlin Heidelberg, pp. 62-65, 2003. 11. Hertz, S.R., "English text to speech conversion with delta," Acoustics, Speech, and Signal Processing, IEEE International Conference on ICASSP '86. , vol.11, pp.2427, 2430, Apr 1986. 12. MATLAB and Simulink Release 2013a, The MathWorks, Inc., Natick, Massachusetts, United States, 2013. 		4-9	
	Authors:	Manmohan Soni, Sankalp Verma		
	Paper Title:	Thermal Analysis of Blast Furnace Cooling Stave Using CFD		
<p>Abstract: Blast furnace Cooling Systems have been developing since 1884. Earlier (till 1920's) the cooling was applied only to hearth and bosh areas. By 1930's and 1940's, cooling was also applied to the shaft. Simultaneously, external cooling methods like shower and jacket cooling of the furnace shell were tried. This method relied on extracting the heat through the furnace shell to the cooling medium, generating high thermal stresses during the heat transfer and hence jeopardizing the integrity of the shell. The main purpose of cooling system is to enhance the furnace campaign life. If heat transfer, thermal stress and furnace campaign life all such parameters should not be analyzed it may lead to catastic failure of Blast furnace. This Paper deals with the computational analysis of three-dimensional model of blast furnace stave, using FEV tool ANSYS FLUENT. Where the inner wall are heated up linearly, due to molten metal inside the furnace and the outer wall is been exposed to ambient condition with the maximum temperature TH and the minimum temperature with Tc The present computational investigation deals with Heat transfer analysis in blast furnace cooling stave and the parametric analysis such as the cooling channel inter-distance and diameter, coating layer on the external surface, cooling water velocity, etc is been done and the effect of</p>				

3.	<p>them in heat transfer of stove or stove performance is been justified. The temperature distribution and flow pattern across the cavities were visualized. The FEV results are validated with well published results in literature and furthermore with experimentation. Results are first presented in the form of streamlines, isotherm contours, thermal stress, and Temperature difference.</p> <p>Keywords: Blast Furnace Stave, CFD, Heat Transfer.</p> <p>References:</p> <ol style="list-style-type: none"> 1. "Global Formulation" Blast Furnace Phenomena and Modelling 1987, pp 97-296 ISBN 978-94-010-8035-4, Springer 2. H. Takano, Y. Kitauchi and H. Hiura, "Design for the 145-MW Blast Furnace Gas Firing Gas Turbine Combined Cycle Plant" J. Eng. Gas Turbines Power 111(2), 218-224 (Apr 01, 1989) (7 pages) 3. Tasuku Senbon, Futoshi Hanabuchi, "Instrumentation to Manufacturing Industries (Application II)" Instrumentation Systems, 1991, pp 603-775 Print ISBN 978-3-662-12091-0, Springer Netherlands 4. Steven Vernengo, Rade Milanovic, Chenn Q. Zhou, Pinakin Chaubal and D. Huang, "Computations of Liquid Flow and Heat Transfer in the Hearth of a Blast Furnace", ASME 2003 International Mechanical Engineering Congress and Exposition Heat Transfer, Volume 1 Washington, DC, USA, November 15–21, 2003 5. E. A. Elsaadawy and W.-K. Lu, "Effect of the Coke-Free Layer Height on the Wear of the Bottom Wall of a Blast Furnace Hearth" ASME 2005 Fluids Engineering Division Summer Meeting Volume 2: For a Houston, Texas, USA, June 19–23, 2005 6. CHENG Su-sen, QIAN Liang, ZHAO Hong-bo, "Monitoring Method for Blast Furnace Wall With Copper Staves", Journal of Iron and Steel Research, International, Volume 14, Issue 4, July 2007, Pages 1-5 7. Lijun Wu, Weiguo Zhou, Huier Cheng, Yunlong Su, Xiaojing Li, "The study of structure optimization of blast furnace cast steel cooling stave based on heat transfer analysis", Applied Mathematical Modelling, Volume 31, Issue 7, July 2007, Pages 1249-1262 8. Lijun Wu, Xun Xu, Weiguo Zhou, Yunlong Su, Xiaojing Li, "Heat transfer analysis of blast furnace stave", International Journal of Heat and Mass Transfer, Volume 51, Issues 11–12, June 2008, Pages 2824-2833 9. Xiao-jun Ning, Shu-sen Cheng, Ning-qiang Xie, "Analysis of temperature, stress, and displacement distributions of staves for a blast furnace", International Journal of Minerals, Metallurgy and Materials, Volume 16, Issue 5, October 2009, Pages 512-516 10. Lijun Wu, Zu'an Lu, Guoping Sun, Jing Li, "Study on intelligent monitoring methodology based on the mathematical model of heat transfer for blast furnace stave", Applied Mathematical Modelling, Volume 34, Issue 8, August 2010, Pages 2129-2135 11. Tong WU, Su-sen CHENG, "Model of Forming-Accretion on Blast Furnace Copper Stave and Industrial Application", Journal of Iron and Steel Research, International, Volume 19, Issue 7, July 2012, Pages 1-5) A. Bonnaccorsi, "On the Relationship between Firm Size and Export Intensity," Journal of International Business Studies, XXIII (4), pp. 605-635, 1992. (journal style) 	10-16				
4.	<table border="1" data-bbox="124 878 1423 967"> <tr> <td data-bbox="124 878 331 922">Authors:</td> <td data-bbox="331 878 1423 922">Kriti Bhargava, Nisheeth Saxena</td> </tr> <tr> <td data-bbox="124 922 331 967">Paper Title:</td> <td data-bbox="331 922 1423 967">Membrane Computing and Its Applications</td> </tr> </table> <p>Abstract: There are two types of computing; one is conventional and another is unconventional. Turing machine is a hypothetical device and a conventional model, model of computation; it is not a random access machine, so to simulate current day's basis systems; in a exact manner register machine had been defined, so they are conventional model of computing. Paradigms like DNA computing, Quantum computing, Membrane Computing, they are model of unconventional computing. These have comes an existence in their resent times and we have found a certain problems can tackle in a very efficient manner using this. The practical use of this is still a question and it's being exploded. Membrane computing which biologically inspired and mathematically motivated. Membrane structure is an essential ingredient of a membrane computing, having hierarchical arrangement of membranes, like a cell or tree. This mainly deals with distributed and parallel computing models. Parallelism is restricted in classical computers bounded by 'n' (16/64) number of processors. But when size of problems increases, then the number of processors can't increases. Unbounded parallelism is exists in DNA, Membrane computing. Because of unbounded parallelism, you can have DNA strands and they can exist within one cubic centimeter of a solution; millions of DNA strands can exists. Because of that the action state place parallel and you can have a number of operations performed simultaneously. The basic features are evolution rules and evolving objects encapsulated in compartments of membranes. These evolution rules are applied on multisets. It is a framework to reflecting a limb of a system model. Inspiration of membrane computing is the process which takes place in a cell, the reaction which develops in cell region. The processing of substances, energy and information in these regions, through the membranes which delimit them are computational processes. We try to simulate these processes and see that anything we can define in a formal manner using this model of computation. In this paper, briefly discuss about membrane computing applications like global clock, L system, solving optimization problems, solving SAT, HPP etc.</p> <p>Keywords: Membrane Computing, P system, HPP, SAT, L system.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Gheorghe Păun. "Introduction to membrane computing." Applications of Membrane Computing. Springer Berlin Heidelberg, 2006. 1-42. 2. Eberhart RC and Kennedy J, "A new optimizer using particle swarm theory," in Proceedings of the sixth international symposium on micro machine and human science, 1995, p. 39-43. 3. Yang Sun, Lingbo Zhang, and Xingsheng Gu. "Membrane computing based particle swarm optimization algorithm and its application." Bio-Inspired Computing: Theories and Applications (BIC-TA), 2010 IEEE Fifth International Conference on. IEEE, 2010. 4. Jin-Hui Zhao, Ning Wang, and Ping Zhou. "Multiobjective bio-inspired algorithm based on membrane computing." Computer Science and Information Processing (CSIP), 2012 International Conference on. IEEE, 2012. 5. Gheorghe Marian and Florentin Ipate. "A Kernel P Systems Survey." Membrane Computing. Springer Berlin Heidelberg, 2014. 1-9. 6. Ana Pavel, Octavian Arsene, Catalin Buiu, "Enzymatic numerical P systems-a new class of membrane computing systems." Bio-Inspired Computing: Theories and Applications (BIC-TA), Fifth International Conference on. IEEE, 2010. 7. Vincenzo Manca and Luca Bianco. "Biological networks in metabolic P systems." BioSystems 91.3 (2008): 489-498. 8. Francesco Bernardini and Marian Gheorghe. "Population P Systems." J. UCS10.5 (2004): 509-539. 9. Zhengwei Qi, Jinyuan You, Hongyan Mao, "P systems and Petri nets." International Workshop, WMC 2003, Tarragona, Spain, July, 2003. 10. Gheorghe Păun, "Computing with Membranes", Journal of Computer and System Sciences, volume 61, issue 1, (Science Direct), August 2000.(http://www.sciencedirect.com/science/article/pii/S0022000099916938). 11. Gheorghe Paun, "Membrane computing [and graph transformation]." Electronic Communications of the EASST 6 (2007). 12. Kamala Krithivasan. Introduction to formal languages, automata theory and computation. Pearson Education India, 2009. 13. Jie Xue and Xiyu Liu. "Applied membrane computation in creative design." Computer Supported Cooperative Work in Design (CSCWD), 	Authors:	Kriti Bhargava, Nisheeth Saxena	Paper Title:	Membrane Computing and Its Applications	17-22
Authors:	Kriti Bhargava, Nisheeth Saxena					
Paper Title:	Membrane Computing and Its Applications					

	2012 IEEE 16th International Conference on. IEEE, 2012.	
14.	Claudio Zandron, Claudio Ferretti, and Giancarlo Mauri. "Solving NP-complete problems using P systems with active membranes." Unconventional Models of Computation, UMC'2K. Springer London, 2001. 289-301. (https://researchspace.auckland.ac.nz/bitstream/handle/2292/3611/102paun.pdf?__&origin=publication_detail)	
15.	Prusinkiewicz, Przemyslaw, and Aristid Lindenmayer. Graphical modeling using L-systems. Springer New York, 1990.(http://algorithmicbotany.org/papers/abop/abop-ch1.pdf)	
16.	Gheorghe Păun and Mario J. Pérez-Jiménez. "Membrane computing: Brief introduction, recent results and applications." BioSystems, vol 85, issue 1, july 2006.	
17.	(http://www.sciencedirect.com/science/article/pii/S0303264706000219).	