TECHNICAL PROGRAM

The First International Conference on Parallel, Distributed and Grid Computing (PDGC-2010)

October 28 - 30, 2010

THURSDAY – 28 October 2010

Registration	**9:30 AM – 10:00 AM (Lobby)**
Inaugural Session	**10:00 AM – 11:00 AM (LT3)**
Morning Break	**11:00 AM – 11:15 AM**
Keynote Session 1	**11:15 AM – 12:15 PM (LT3)** **Session Chair: Sukumar Ghosh, University of Iowa, USA** **Speaker: Yale Patt, University of Texas at Austin, USA** **Title: The Microprocessor of 2020: Why you should care, and what you can do about it**
Technical Session 1A **Parallel Computing**	**12:15 PM – 1:45 PM (CR7)** **Session Chair: Thomas Edward, University of the West Indies, BARBADOS** **Several Approaches to Parallel Computing in the Boolean Domain** Bernd Steinbach and Wolfram Wessely Institute of Computer Science, Freiberg University of Mining and Technology, GERMANY Christian Posthoff Department of Mathematics & Computer Science, University of the West Indies, TRINIDAD & TOBAGO **Ray Tracing using Symmetric Multiprocessor Environment** Bamnote G. R. and Petkar H. J. Dept. of Comp. Sci. & Engg, Sant Gadge Baba Amaravati University, Maharashtra, INDIA **A Study on the performance of serial code on Shared Memory Parallel Architecture** Subrata Sinha, Subrata Chakraborty and Manash Pratim Barman Center for Bioinformatics Studies, Dibrugarh University Dept. of Statistics, Dibrugarh University, INDIA **Query slicing with pipeline processing: An effective approach towards improving application performance in a multicore environment** Prabin Ranjan Sahoo, Sujit kale and Hitesh Shetty Tata consultancy services, Mumbai, INDIA

	A Scalable Parallel Wavelet Transform Based Finite Element Solver Sarosh Mumtaz Quraishi and Sandeep Kumar Department of Mechanical Engineering, Institute of Technology, Banaras Hindu University, Varanasi-221005, INDIA
Technical Session 1B **Distributed Systems**	**12:15 PM – 1:45 PM (CR8)** **Session Chair: Nabanita Das, Indian Statistical Institute, Calcutta, INDIA** **An Efficient Key Management Scheme for Mobile Agents in Distributed Networks** Morteza Nikooghadam, Farshd Safaei and Ali Zakerolhosseini Faculty of Electrical and Computer Engineering Shahid Beheshti University, Tehran, IRAN **Client cache for PVFS2** Hugo E. Camacho, Erik Nieto, Antonio F. Díaz, Mancia Anguita and Julio Ortega Department of Computer Architecture and Technology, University of Granada, SPAIN **Efficient Scheduling Algorithms for Real-Time Distributed Systems** Apurva Shah G H Patel College of Engg & Tech., Vallabh Vidyanagar, INDIA Ketan Kotecha Nirma Institute of Technology, Ahmedabad, INDIA **BER Performance Improvement in OFDM Systems using Equalization Algorithms** Davinder Saini and Bhasker Gupta Department of Electronics and Communication, Jaypee University of Information Technology, Waknaghat, Solan, H.P., 173215, INDIA **A Realistic Model for Runtime Incremental Task Scheduling in Distributed Memory Multiprocessor Systems** Subhasis Mallick B.P.Poddar Institute of Management & Technology, Calcutta, INDIA Amitava Sinha West Bengal University of Technology, Calcutta, INDIA **Scalable link analysis algorithm for a distributed memory environment** Joy James Prabhu College of Engineering, Anna University, Chennai, INDIA
Lunch Break	**1:45 PM – 2:45 PM (Shastri Bhawan)**
Keynote Session 2	**2:45 PM – 3:45 PM (LT3)** **Session Chair: Bernd Steinbach, Freiberg University of Mining and Technology, GERMANY** **Speaker: Raj Buyya, University of Melbourne, AUSTRALIA** **Title: Cloud Computing: The Next Revolution in Information Technology**

Afternoon Break	**3:45 PM – 4:00 PM**
Technical Session 2A **Grid Computing**	**4:00 PM – 5:30 PM (CR7)** **Session Chair: Jeffrey Elcock, University of the West Indies, BARBADOS** **Introduction of a Grid-Aware Portlet for Numerical Calculations** Hrachya Astsatryan, Vladimir Sahakyan, Yuri Shoukourian, Myasnik Srapyan, Michel Daydé, Aurelie Hurault, Romulus Grigoras Institute for Informatics and Automation Problems, National Academy of Sciences of Armenia, ARMENIA Michel Daydé, Aurelie Hurault, Romulus Grigoras, Institut de Recherche en Informatique de Toulouse, Ecole Nationale Supérieure d´Electrotechnique, d´Electronique, d´Informatique, d´Hydraulique et des Télécommunications, FRANCE **An Efficient Negotiation Based Algorithm for Resources Advanced Reservation Using Hill Climbing in Grid Computing System** Seiiedeh Yasaman Rashida Arak branch, Islamic Azad University, Arak, IRAN Mohammad TeshnehLab Electrical Eng.K.N.Tossi University, Tehran, IRAN Amir Masoud Rahmani Computer Engineering Department, Islamic Azad University science and research branch, Tehran, IRAN **Optimized Grid Scheduling Using Two Level Decision Algorithm (TLDA)** Jayant Umale Department of Computer Engineering, D.J.Sanghvi College of Engineering, Mumbai, INDIA Sunita Mahajan MET's Institute of Computer Science, Bandra(W), Mumbai, INDIA **Grid based Real Time Collaborative System** R.Manavalan, Kishor Gupta, Subrata Chattopadhyay, Mangala Centre for Development of Advanced Computing (C-DAC), Bangalore, INDIA **Scheduling Tasks in Mobile Grid Environment using Mobility based Resource Prediction** S.Stephen Vaithiya and S. Mary Saira Bhanu Dept. of Computer Science Engg, National Institute of Technology, Tiruchirappalli, INDIA **Adaptive Resource Discovery Models and Resource Selection in Grids** Ram mohan Rao Kovvur Dept. of Computer Science and Engg, Vasavi College of Engg, Hyderabad, A.P. INDIA VijayaKumar Kadappa Dept. of Computer Applications, Vasavi College of Engineering, Hyderabad, A.P. INDIA S Ramachandram Department of Computer Science and Engg, Osmania University, Hyderabad, A.P. INDIA A Govardhan Dept. of Computer Science and Engineering, JNT University, Hyderabad, A.P. INDIA

Technical Session 2B **Dependable Computing and Systems**	**4:00 PM – 5:30 PM (CR8)** **Session Chair: Yale Patt, University of Texas at Austin, USA** **Optimizing Resources in Real-time Scheduling for Fault Tolerant Processors** Radhamani Pillay, Amrita Vishwa Vidyapeetham, Coimbatore, INDIA Senthil Kumar Chandran, AERB-Safety Research Institute, Kalpakkam, INDIA Sasikumar Punnekkat, M¨alardalen Real-Time Research Centre, M¨alardalen University, V¨aster°as, SWEDEN **Fault Tolerant PVFS2 based on Data Replication** Erik Nieto, Hugo E Camacho, Antonio F Díaz, Mancia Anguita and Julio Ortega Department of Computer Architecture and Technology, University of Granada, SPAIN **A Fast Genetic Algorithm Based Static Heuristic for Scheduling Independent Tasks on Heterogeneous Systems** Gaurav Menghani Department of Computer Engineering, Thadomal Shahani Engineering College, Mumbai, INDIA **Recovery of N process deadlock using Auction Theory** Pramod Mane, Shalini Gupta and Gautam Bandyopadhyay Department of Information Technology NIT Durgapur,713209, INDIA **A Robust and Fault-Tolerant Distributed Intrusion Detection System** Jaydip Sen Innovation Lab, Tata Consultancy Services Ltd., Kolkata, INDIA **Fault Tolerant Routing Using Improved Safety Vectors** Rajib K. Das Dept. of Comp. Sci. & Engg., University of Calcutta, Kolkata - 700009, INDIA
Conference Dinner	**8:00 PM – 10:00 PM (Hotel Destination)**
FRIDAY – 29 October 2010	
Keynote Session 3	**9:30 AM – 10:30 AM (LT3)** **Session Chair: Satya P. Ghrera, Jaypee University of Information Technology, INDIA** **Speaker: Christian Scheideler, University of Paderborn, GERMANY** **Title: Robust Open Internet Services**
Morning Break	**10:30 AM – 11:00 AM**

Technical Session 3A **Network-Based Computing**	**11:00 AM – 12:30 PM (CR7)** **Session Chair: Sukumar Ghosh, University of Iowa, USA** **Performance Evaluation of a Novel Dimension Order Routing Algorithm for Mesh-of-Tree based Network-on-Chip Architecture** Kanchan Manna, Santanu Chattopadhyayy, and Indranil Sengupta School Of Information Technology Department of Electronics and Electrical Communication Engineeringy Indian Institute of Technology, Kharagpur, Kharagpur-721 302, INDIA **Cooperative Distributed Problem Solving through Ad Hoc Agent Coalitions** Vivek Kumar Singh, Subuhi Husaini and Akanksha Singh Department of Computer Science, Banaras Hindu University, Varanasi, INDIA **Design and Implementation of Fixed Accounting Strategy for Dynamic IP Based Networks** Deepa Shenoy , Venugopal K R and Chandrakanth Naikodi Dept. of Computer Science and Engg, University Visveswaraya College of Engineering K. R. Circle, Bangalore – 01, INDIA **A Heterogeneous Power Efficient Load Balancing Target-Monitoring Protocol for Sensor Networks** Samayveer Singh and Ajay K Sharma Department of Computer Science and Engineering National Institute of Technology, Jalandhar, INDIA **An Improved Trust Calculation Method for Mobile Adhoc Network** Amit Chauhan Institute of Engineering and Science, IPS Indore, INDIA **Protocol to Simulate Application of RFID Technology in Public Transportation System** Deepa Shenoy , Venugopal K R and Chandrakanth Naikodi Dept. of Computer Science and Engg, University Visveswaraya College of Engineering K. R. Circle, Bangalore – 01, INDIA
Technical Session 3B **Security and Privacy**	**11:00 AM – 12:30 PM (CR8)** **Session Chair: Alok Singh, University of Hyderabad, INDIA** **Enhanced Implementation of the NTRU-Encrypt Algorithm Using Graphics Cards** Abdel Alim Kamal and Amr M. Youssef Concordia Institute for Information Systems Engineering Concordia University, Montreal, CANADA **Stopping Communication of Malicious Nodes in MANETs using Authorized Token** Chandrakant N, Swati P Joshi, P Deepa Shenoy and Venugopal K R Department of Computer Science and Engineering, University Visvesvaraya College of Engineering, Bangalore University, Bangalore, INDIA L M Patnaik Defense Institute of Advanced Technology, Pune, INDIA

	Randomness Evaluation of Stream Cipher for Secure Mobile Communication Musheer Ahmad and Izharuddin Department of Computer Engineering, ZH College of Engineering and Technology, AMU, Aligarh, 202002, INDIA **A Novel protocol for Secure Data Storage in Data Grid** Sudalai Muthu T Computer Science and engineering, Hindustan university, Chennai, Tamilnadu, INDIA **Investigation Analysis to find the Security Vulnerabilities in DHT Oriented Peer to Peer Network** Anil Saroliya Department of CS, Amity School of Engineering , AMITY University, Jaipur, Rajasthan, INDIA
Lunch Break	**12:30 PM – 2:00 PM (Shastri Bhawan)**
Technical Session 4A **Cluster and Cloud Computing**	**2:00 PM – 3:30 PM (CR7)** **Session Chair: Raj Buyya, University of Melbourne, AUSTRALIA** **Adaptive Scheduling of Workflows on Multicluster Platforms** Wahid Nasri and Wafa Nafti Higher School of Sciences and Techniques of Tunis, Department of Computer Science, 1008 Tunis, TUNISIA **Window based security-sensitive scheduling for real-time application on cluster** Rajib Lochan Jana, Rama Shankar Yadav and Sarsij Tripathi Dept. of Comp. Sci. & Engg, Motilal Nehru National Institute of Tech., Allahabad, INDIA **E-DEEC- Enhanced Distributed Energy Efficient Clustering Scheme for heterogeneous WSN** Parul Saini and Ajay.K.Sharma Department of Computer Science & Engg., Dr. B. R. Ambedkar National Institute of Technology, Jalandhar, Punjab, 144011, INDIA **Implementing Digital Signature with RSA Encryption Algorithm to Enhance the Data Security in Cloud Computing** Uma Somani and Kanika Lakhani Somany Institute of Technology & Management, Rewari , INDIA Manish Mundra Global Logic Private Limited , Pune , INDIA **Ensuring Data Storage Security in Cloud Computing using Sobol Sequence** Pasupuleti Syam Kumar, R Subramanian and Thamizh Selvam D Dept of Computer Science, School Of Engineering, Pondicherry University, Puducherry. INDIA **Cloud Computing : New challenge to the entire computer industry** Peeyush Mathur and Nikhil Nichal Department of Computer Engineering

	Sobhasaria Engineering College, Sikar, INDIA
Technical Session 4B **Wireless Networks**	**2:00 PM – 3:30 PM (CR8)** **Session Chair: Bernd Steinbach, Freiberg University of Mining and Technology, GERMANY** **Localized Algorithm for Connected Set Cover Partitioning in Wireless Sensor Networks** Nargis Pervin, Dipankar Layek, Nabanita Das Indian Statistical Institute, 203, B. T. Road, Kolkata-700108, INDIA **Performance Analysis of a Fuzzy Logic Based Adaptive Call Admission Control over Heterogeneous Wireless Networks** Asish K Mukhopadhyay Dept. of Electronics & Comm. Engg Dr. B C Roy Engineering College, Durgapur,713206, INDIA Sajal Saha Dept. of Computer Applications, Narula Institute of Technology, Kolkata, 700109, INDIA **On Throughput Optimization of Multichannel Single Interface 802 11 Protocol in Wireless Mesh Networks** Mushtaq Hussain and Qazi Ijaz Ali Institute of Business and Management Sciences, Agricultural University, Peshawar, PAKISTAN Fazl e Hadi Bahria University, Islamabad, PAKISTAN **A Handoff Management for Next Generation Wireless Systems** Debabrata Sarddar, Joydeep Banerjee and Souvik Kumar Saha Dept. of Electronics and Telecommunication Engg, Jadavpur University, Kolkata, INDIA Tapas Jana Dept. of Electronics and Comm. Engg, Netaji Subhash Engg College, Kolkata, INDIA **An IPC Key Management Scheme for Wireless Sensor Network** Ritu Sharma, Yogesh Chaba and Yudhvir Singh Dept. of Comp. Sci. and Engg., Guru Jambheshwar University of Sci & Tech, Haryana, INDIA **Learning With Distributed Data in Wireless Sensor Network** Meenakshi Panda , P M Khilad and T Panigrahi Department of ECE, National Institute of Technology Rourkela-769008, INDIA
Afternoon Break	**3:30 PM – 4:00 PM**
Technical Session 5A **Multimedia and Service Networking**	**4:00 PM – 5:30 PM (CR7)** **Session Chair: Manu Sood, Himachal Pradesh University, INDIA** **A Swarm Intelligence Approach to the Minimum Reload Cost Spanning Tree Problem** Abobakr Khalil and Alok Singh, Department of Computer & Information Sciences, University of Hyderabad, INDIA

	Performance Evaluation of Constrained Flooding Routing Protocol for WSNs Based on Path Loss Exponent Deepti Gupta and Ajay K Sharma Department of Computer Science and Engineering, National Institute of Technology, Jalandhar, Punjab, INDIA **Performance Isolation and Scheduler Behavior** Gaurav Somani LNM-IIT, Jaipur, Rajasthan, INDIA Sanjay Chaudhary DA-IICT, Gandhinagar, Gujarat, INDIA **An efficient multi code assignment scheme to reduce call establishment delay for WCDMA networks** Davinder Saini and Vipin Balyan Dept. of Electronics and Communication Engg, JUIT, Solan, H.P., INDIA **Efficient Energy Constrained Scheduling Approach for Dynamic Real Time System** Ranvijay and Rama Shankar Yadav Department of Computer Science and Engineering, Motilal Nehru National Institute of Technology, Allahabad, INDIA Smriti Agrawal Department of Computer Science and Engineering, JUIT, Solan, H.P., INDIA
Technical Session 5B **Web Applications**	**4:00 PM – 5:30 PM (CR8)** **Session Chair: Dietmar Tutsch, University of Wuppertal, GERMANY** **Performance analysis of Web services in mobile environment using SWN and WAP protocol** Fatoumata BALDE, Mbaye SENE and Youssou KASSE Laboratoire Lamsade, Universit ´e ParisDauphine, FRANCE **Compilation Server – Design and Implementation** Mrudula Nimbarte Computer Engg. Dept., Bapurao Deshmukh College of Engg., Sevagram, Wardha, MS, INDIA Smita Nagtode Electronics & Telecommunication Department, Datta Meghe Institute of Engineering, Sawangi(Meghe), Wardha, MS, INDIA **A Novel Approach for Selection of Semantic Web Services in Service-Oriented Goal Based Framework** Ujjal Marjit, Umasankar Debnath, Abhik Kumar De and Utpal Biswas CIRM, University of Kalyani, Nadia, W.B., INDIA **AKSHR: A Novel Framework for a Domain-specific Hidden Web Crawler** Komal Kumar Bhatia and A.K. Sharma Department of Computer Engineering, YMCA Institute of Engineering, Faridabad, INDIA **An Efficient Approach to Web Page Classification using Non-Linear Cellular Automata** Anirban Kundu and Debasis Roy 11/D, Balai Mistry Lane, Howrah-711103, West Bengal, INDIA

Cultural Function and Dinner	**7:30 PM – 10:00 PM (JUIT Campus)**

SATURDAY – 30 October 2010

Keynote Session 4	**9:30 AM – 10:30 AM (LT3)** **Session Chair: Pranay Chaudhuri, Jaypee University of Information Technology, INDIA** **Speaker: Dietmar Tutsch, University of Wuppertal, GERMANY** **Title: Reconfigurable Parallel Computing**
Morning Break	**10:30 AM – 10:45 AM**
Technical Session 6A **Peer-to-Peer Computing**	**10:45 AM – 12:15 PM (CR7)** **Session Chair: Christian Scheideler, University of Paderborn, GERMANY** **An Efficient Lookup Algorithm for Dynamic Peer-to-Peer Chord** Ashok Kumar Ojha and Krishna Kant Department of Computer Science and Engineering Motilal Nehru National Institute of Technology, Allahabad – INDIA **Swarm Intelligence based Resource Allocation Algorithm for Cognitive Radio Network** Siba K. Udgata, K.Praveen Kumar and Samrat L. Sabat School of Physics, University of Hyderabad, Hyderabad, 500046, INDIA **Decentralized P2P Grid Resources Discovery Model in LC-Trie Structured overlays** Priyanka Vashisht and Anju Sharma #125 street no. 4A sidhu colony Patiala, INDIA **Fast Handoff Mechanism in WLANs Based on Neighbor Graph** Debabrata Sarddar and Tarasankar Patra Dept. of Electronics and Telecomm. Engg., Jadavpur University, Kolkata, INDIA Tapas Jana Dept. of Electronics and Comm. Engg., Netaji Subhash Engg College, Kolkata, INDIA Utpal Biswas Dept. of Computer Science and Engg, University of Kalyani, Nadia, W.B., INDIA **IMCC Protocol in Heterogeneous Wireless Sensor Network for High Quality Data Transmission in Military Applications** Kakelli Anil Kumar Dept of IT, Anurag Engg, College, JNTUH, Kodad, AP, INDIA

	Secure Multiparty Privacy Preserving Data Aggregation by Modular Arithmetic Arijit Ukil and Jaydip Sen Innovation Labs, Tata Consultancy Services, Kolkata, INDIA
Technical Session 6B **Related Fields**	**10:45 AM – 12:15 PM (CR8)** **Session Chair: Ajay K. Sharma, National Institute of Tecchnology, Jalandhar, INDIA** **Bit Plane Slicing Technique for IRIS based Biometric System** Banshidhar Majhi , Phalguni Gupta, Hunny Mehrotra and Badrinath Srinivas Dept. of Computer Science and Engg., Indian Institute of Technology Kanpur, INDIA **Persistent data Structure Library for C++ Applications** K. A. T. A. Jayasekara and Sanath Jayasena Dept. of Computer Science and Engg., University of Moratuwa, Katubedda, Moratuwa, SRI LANKA **Privacy-Preservation Naïve Bayes Classification using Trusted Third Party and Different Offset Computation over Distributed Databases** Keshavamurthy B.N., Mitesh Sharma and Durga Toshniwal Dept. of Electronics and Computer Engg., Indian Institute of Technology, Roorkee, INDIA **Text Document Clustering Based on Frequent Concepts** Rekha Baghel and Renu Dhir Dept. of Computer Science and Engg., Dr. B. R. Ambedkar National Institute of Technology, Jalandhar, Punjab 144011, INDIA **A Framework for Hierarchical Clustering based Indexing in Search Engines** Parul Gupta and A.K. Sharma Dept. of Computer Engg., Y.M.C.A. University of Science and Technology, Faridabad, INDIA **Active Learning Environment: Gain the Most from PBL for Teaching Virtual Machine Module on Operating System** V. K. Mishra, Megha Mishra and H. R. Sharma Chhatrapati shivaji Institute of Technology Chhattishgarh, INDIA
Closing Ceremony	**12:15 PM – 1:00 PM (LT3)**
Lunch	**1:00 PM – 2:00 PM (Shastri Bhawan)**
Excursion (Shimla)	**2:30 PM – 6:30 PM**