Welcome to ICGCIoT 2015!

On behalf of the Organizing Committee ICGCIoT 2015, it is our pleasure to welcome you all to the International Conference on Green Computing and Internet of Things. ICGCIoT 2015 is the 1st international conference initiated from India by GCET to provide an international forum for the presentation and discussion of recent advances in Green Computing and IoT.

ICGCIoT is technically sponsored by UP Section of IEEE, IEEE Computer Society, IEEE Systems, Man and Cybernetics Society, IEEE Electron Devices Society (EDS), Malaysia, International Neural Network Society (INNS), and supported by Indian Society for Technical Education (ISTE), ComTec, UNIKASSEL VERSITAT, and Research Publishing, Singapore. The conference will be held from 8 – 10 October 2015 at Galgotias College of Engineering & Technology (GCET), Greater Noida on the beautiful campus of Galgotias Institutions.

We are honored to have 9 internationally renowned keynote speakers, who will deliver their keynote speeches in the morning sessions. Three short-course will be conducted by experts in their respective fields. There are 9 invited presenters from all over the world who will present their latest research. We also planned for 2 tutorials by Dr. Vivek S. Deshpande of MIT College of Engineering, Pune and Dr. Prakash D. Vyavahare, S.G.S. Institute of Technology and Science, Indore on 10 October 2015.

A total of 968 submissions from 16 countries were received witnessing this truly popular and international event. The Technical Program Committee (TPC) comprising 123 experts from academia and industry selected 311 papers (includes 14 poster papers) for presentations. The conference will run in 5 parallel sessions in 3 days, in which 3 Best Paper will be selected based on the recommendation by the reviewers.

We would like to express our sincere thanks to our Keynote speakers, all the authors, and the conference attendees. Our deep appreciation goes to Peer-Review Oversee members, Steering Committee members, TPC members, and Session Chairs for their invaluable contribution. Recognition should go to the Local Organizing Committee members who have all worked extremely hard for the details of important aspects of the conference programs and social activities. We appreciate the contributions of all the student volunteers who have given their time to help make the conference successful. We would like to thank C & M Consultants for their great services as a Professional Conference Organizer (PCO). We wish to thank Mr. Sankaran of Research Publishing, Singapore for his invaluable support.

We are grateful to our technical sponsors IEEE UP Section, IEEE Computer Society, IEEE Systems, Man, and Cybernetics Society, IEEE Electron Devices Society (EDS), Malaysia and International Neural Network Society (INNS). Finally, we would like to thank all our sponsors and supporters for their contribution to the conference.

Enjoy the 2015 edition of ICGCIoT and your stay in Greater Noida.

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Prof. Aatif Jamshed, Technical Program Co-Chair
ICGCIoT 2015 Organizing Committee
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Yan Pei
Yasin KABALCI
You-Chiun Wang
Zhihua Cui
Zoubir Mameri
Short Courses

Date/Time: Thursday, 8 October 2015 / 11:30 – 18:00
Venue/Room: 104, First Floor, Block E

Introduction to Cryptography and Network Security

Dr. Asoke Nath
Department of Computer Science, St. Xavier’s College, Kolkata

Biography

Dr. Asoke Nath is presently working in the field of Cryptography, Steganography, e-learning, green computing. Dr. Nath developed some new symmetric key algorithms namely MSA, DJSA, DJSSA, NJJSAA, TTJSA, TTSJA, UES, MES, BLES, MWFES. Dr. Nath has developed a new algorithm to embed secret message (Text or image or any file) inside an ASCII file or in some Microsoft word file. Dr. Nath and his research group is working in the field of symmetric key cryptography and cryptanalysis. Dr. Nath has published 128 papers in National and International Journals and Proceedings of Conferences. He is a member of MIR Labs(USA) and also member as Board of Editors in more than 30 International Journals.

Abstract

Cryptography is a subject which primarily deals with how one can modify a readable text or document/object to unreadable text or document/object. In cryptography we have two different approaches one is called encryption algorithm by which one can modify the readable text to some encrypted form which the people can not read or understand. The second approach is just the reverse of encryption that means to get back the original text or object from encrypted form by using some algorithm called decryption algorithm. Generally the decryption algorithm is the reverse process of encryption algorithm. The encryption or the decryption methods are of two types such as (i) Symmetric Key Cryptography where one key is used for encryption as well as decryption purpose and (ii) Public key cryptography where we use one key called public key for encryption purpose and another key called private key which is used for decryption purpose. The encryption key is distributed to all senders and the decryption key is distributed to the receiver only. In this short-course the author will try to focus on different symmetric key algorithm including some recent trends in symmetric key encryption methods and also discuss the public key cryptography including RSA algorithm.

Date/Time: Cancelled
Venue/Room: –
**Date/Time:** Thursday, 8 October 2015 / 11:30 – 18:00  
**Venue/Room:** 105, First Floor, Block E

### Introduction to Big Data & Analytics

Ms. Revathy Padmanaban  
*Big Data Automation Consultant, Big Data Assurance Unit, Tata Consultancy Services (TCS) Limited, India*

#### Biography

**Revathy Padmanaban** is working as Big Data Automation Consultant at Big Data Assurance Unit, Tata Consultancy Services (TCS) Limited, India. At TCS she is one of the key players in developing and managing big data projects on cloud domain. Prior to TCS, she has served the Cloud Unit at Infosys Limited, India. At Infosys, Revathy has involved in developing one of the cutting-edge projects during 2013 that migrated the conventional Massively Parallel Processing (MPP) database Impala to Hadoop-based database HBase for the client Boeing, the world’s largest company that designs, manufactures, and sells airplanes, rotorcraft, rockets and satellites. In addition, she was one among the leads of ‘Infosys Internship Program’ for two consecutive years 2012 and 2013, which benefits the Indian Engineering College students to complete their final year project with exclusive project-intensive training at Infosys. She has received her B.Tech in Information Technology from Anna University and M.Tech in Computer Science and Engineering from Dr. MGR University. She is also an IBM Certified Solution Adviser for Cloud Computing Architecture V2.

She has published 8 refereed research papers covering vast range of top international publishers like ACM, Elsevier, IEEE & Springer, etc. She has participated and presented papers in 20+ international/national conferences worldwide. She is also a peer reviewer for many international conferences around the globe. She is an active member of many professional-bodies like Researchers Academy, Identity Research Group, International Association of Engineers, Computer Society of India and Teacher’s Academy. Her major research focuses on Big Data, Cloud Computing, Cloud Security and Search Engine Optimization. Her areas of expertise include Hadoop, Advanced Java Programming, System Design, Google App Engine, etc.

#### Abstract

Big data is data that surpasses the processing capacity of conventional database systems. The data is too big, moves too fast, or doesn’t fit the limits of your database architectures. To process and get insights from this data, we must choose an alternative way to process it. The hot IT catchphrase, big data has become feasible as cost-effective approaches have now emerged to tame massive data. Within this data lies valuable information, previously hidden because of the amount of work required to extract them. To leading corporations, such as Walmart or Google, this power has been in reach for some time, but at fantastic cost. Today’s commodity hardware, cloud architectures and open source software bring big data processing into the reach of the less resourced. Big data processing is eminently feasible for even the small garage startups, who can cheaply rent server time in the cloud. The value of big data to an organization falls into two categories: analytical use and enabling new products. Big data analytics can reveal insights hidden previously by data too costly to process. The past decade’s successful web startups are prime examples of big data used as an enabler of new products and services. This short course will focus on the concept of big data technologies and business analytics with its strategic importance to any organization. Participants will be introduced to the concept of business analytics with big data technologies: Hadoop, Hive and HBase.
Tutorials

Date/Time: Saturday, 10 October 2015 / 10:00 – 01:00
Venue/Room: 104, First Floor, Block E

Design Challenges in the Wireless Sensor Communications Networks

Dr. Vivek Deshpande
Associate Professor, Dean (Research and Development), MIT College of Engineering, Pune

Biography

Dr. Vivek S. Deshpande, Dean, Research & Development, MIT College of Engineering, holds Bachelors and Masters of Engineering in Electronics and Telecommunications from Pune University. Currently he is doing a research in Wireless Sensor Networks, embedded systems and High Performance Computer Networks. He is a Chair of IEEE Communication Society, Pune Chapter and Member of IEEE Computer Society, India Council.

Specific topics of interest and Research: Wireless sensor networks, Body area networks, Quality of Service, Algorithm/Protocol development, Mobile Communications and mobility in WSN, Wireless Communications and networking in WSN, Information and Communications technologies in WSN, Simulation, Modeling and analysis and performance evaluations, Network management and services, Health care and home networking, Reviews and Applications: Social, health, sports, environmental, etc.

The Rs.25 lacks of funded projects “Highway Traffic Monitoring Systems (HTMS)” phase-I is done under his guidance. He guided the 10 person’s team of technical researchers. The innovation of palm tops based on Android ported on ARM is having great success of research project. Many industries achieve huge success in their research and development with the kind help of his technical consultancy.

His 25 years of teaching and industrial experience is an asset to the organization. He is working as Associate Professor in Department of Information Technology. His expertise in the field of Wireless computer Networks and Distributed system helps in guidance to the PG students.

Abstract

Now-a-days Wireless Sensor Networks plays predominant role in the communication domain. The data to be disseminated from multiple sources to the destination base station or sink is having vital significance. There are many problems with which data can be conveyed up to the sink. The congestion, reliability, delay, fairness, etc. are of main concern. These can be treated as Quality of Service parameters that govern the performance of the WSN. Above all the Energy’s consumption is the main constrain for WSN node. It is very difficult to obtain good QoS by keeping energy consumption low. Even if response of one of QoS parameter will depends on the many other QoS parameters. We have to take care of all QoS parameters to improve the performance of the wireless sensor networks. This Quality of Services may improve the application base of the WSN. With the QoS parameters the data dissemination along with energy optimization is get affected. We have to check the performance of the WSN against the QoS metrics for different data inputs. This may contain the periodic-non periodic data, event based data, transient or bursty data. For all these different types of inputs data we are checking the performance of QoS parameters like congestion, reliability and fairness. This may lead to new researcher to verify their results and excel their research work accordingly.

This tutorial will will able the audience to design and develop the wireless sensor network. They must able to analyze the performance of sensor network and would possibly build an applications based on the WSN for national and social interested activities.
Date/Time: Saturday, 10 October 2015 / 14:00 – 16:00
Venue/Room: 104, First Floor, Block E

Cryptographic Techniques for Secure Communication: Historical Perspective to Secret Sharing

Dr. Prakash D. Vyavahare
Senior Member IEEE, Professor and Head, Department of Electronics and Telecom. Engg., S. G. S. Institute of Technology and Science, INDORE (M. P.)

Biography

Dr. Prakash D. Vyavahare (SM-IEEE(USA), F-IETE(India), F-IE(India)) is Professor and Head in Department of Electronics and Telecommunication Engg. at S. G. S. Institute of Technology and Science, Indore, India. He received his M. Tech. and Ph. D. degrees from IIT Bombay in 1976 and 1995 respectively. He worked at Tata Institute of Fundamental Research, Bombay as Communication Engineer from 1976 to 1982. He was Hindu-Hitachi scholar at Hitachi Ltd. Japan in 1981-82. He then joined SGSITS Indore (1982) and in past held various positions in the institute such as Dean (R & D) and Dean (Administration). He was associate of ICTP (UNESCO organization), Trieste, Italy during 1998 to 2005. He has 24 papers to his credit in international and national journals including IEEE Transactions on Communications, IEEE Transactions on Electronic Devices and IEEE Transactions on Instrumentation and Measurement. He has guided six Ph. D. students and four scholars are pursuing their research under his supervision. In the past, he has delivered seminars at various organizations including CERN (Geneva), Milan polytechnic Milan and INRIA Rocquencourt France. His areas of interests include channel coding, channel modeling, cross layer design issues and secure communication.

Abstract

Cryptographic techniques have been used for more than 2000 years to achieve confidentiality and authenticity in secure information transmission. Over the period of time various (cryptographic) codes have been designed (and broken) by employing mathematical structures and their properties. The field got impetus after the establishment of Kerckhoff’s principle (1883) and mathematical structures like Galois field (1832). The notion of confusion and diffusion by Claude Shannon (1949) and Shamir’s public key cryptography (1978) opened up new areas of research and development in the field of cryptology. The proliferation of internet and mobile technology during the last two decades has extended the applications of cryptography from traditional military applications to that of public (society) use such as secure e-payment over internet etc. This has lead to establishments of various standards such as 3DES, AES and RSA. The advancements in the processing speed of computers also necessitates design of new standards. Recently, the field has obtained a new dimension in the area of secret sharing (Shamir 1979) and multiple secret sharing (Li Bai 2006). The talk aims to cover the panoramic view conventional and asymmetric key cryptography and some of the developments in the field of secret sharing and possible areas of research in this emerging field.
Keynotes

Inaugural Keynote I

Date/Time: Thursday, 8 October 2015 / 10:15 – 11:00
Venue/Room: Auditorium, Block D

Digital Monozukuri for Open Innovation

Dr. Aynur Unal
Stanford University, USA

Biography

Dr. Aynur Unal is a former professor of engineering (Stanford, 1984, Penn State 1994), and selected as the first chairwoman of industrial engineering (Clemson University, 2000), a high profile semiconductor manufacturing supply chains professional of Silicon Valley who worked at Siemens, LSI Logic and Flextronics as an executive for global manufacturing information systems and most recently with their spin off start-ups Triada, e2open, Saqqara systems, datareliability and amteus and finally imjack. She has been a principal consultant with Dubai Internet City, and Konya Teknokent, most recently she is bringing in the social responsibility dimension into her incubation and innovation activities by getting involved in social entrepreneurial projects on street children and ageing care (she founded a software testing company for unemployed youth, www.softt.net, 2010 and she is an advisor to www.kasev.org, 2010) with the partnerships of international non-profit organizations (Unesco), governments in UK+EU+MEA and VC funds.

Abstract

Several applications of Digital Monozukuri from Design Tools to mobile advertisement will be discussed and shared. The interactive learning is the next phase of active learning and design professionals can actually learn via interactions as they design. Similarly the concepts of interactivity of “gamification” can be used in demand pulled mobile advertisements and examples will be given.
Keynote II

Date/Time: Thursday, 8 October 2015 / 11:30 – 12:15 hrs
Venue/Room: Auditorium, Block D

Justifying Uberveillance — The Internet of Things and the Flawed Sustainability Premise

Dr. Katina Michael
University of Wollongong, Australia

Biography

Dr. Katina Michael is an Associate Professor in the Faculty of Engineering and Information Sciences at the University of Wollongong. She has had industry experience in telecommunications engineering and holds cross-disciplinary qualifications in information technology and law.

Katina is editor-in-chief of IEEE Technology and Society Magazine and senior editor of IEEE Consumer Electronics Magazine. She researches the social implications of emerging technologies with an emphasis on national security.

Her most recent book is titled: Uberveillance and the Social Implications of Microchip Implants. She is a senior member of the IEEE, actively involved in the Society for the Social Implications of Technology. Katina has program chaired two international symposia on Microchipping People (2010, University of Wollongong), and Wearable Computers (2013, University of Toronto), and has run an annual workshop series on the Social Implications of National Security since 2006, originally funded by the ARC Research Network for a Secure Australia.

Abstract

Imagine a world where everything was numbered. Not just homes with street addresses, or cars with number plates, or smart phones with telephone numbers, or email addresses with passwords, but absolutely everything you could see and touch and even that which you could not. Well, that world is here, right now. This vast expanse we call “Earth” is currently being quantified and photographed, inch by inch, by satellites, street cameras, drones and high altitude balloons. Longitude and latitude coordinates provide us with the precise degrees, minutes and seconds of the physical space, and unique time stamps tell us where a moving object or subject is relative to a point of interest, how fast and in what direction it is going, how hot it is, and whether it is a living or non-living thing.

We’ve built a technology system called the “Cloud” based on something called the “Internet” and it all runs on 1s and 0s. Things are either “on” or “off”, they’re either “yes” or “no”, “now” or “later”. We’ve dug up the ground, built electricity grids, copper, cable and fiber runs the distance. We’ve transcended ocean floors and gone terrestrial. From wireline to wireless, we’ve sought ambience, breathed life into the lifeless, created broadband, Bluetooth, and wi-fi. We busy ourselves preoccupied with tagging it all. One IP address after another. We encourage each other to virtually assemble together, in little communities and then to share incrementally bit by bit. We’ve called this phenomenon crowdsourcing, and get a buzz from feeling that we’re making a difference. Just think what we could achieve if we could pool our minds together, coordinate our resources better, and our unused energy in real-time and real space. No more hunger, no more poverty, no more unemployment. Optimization to the maximum: no more waste, just efficiency and effectiveness. Utilitarianism.
Date/Time: Thursday, 8 October 2015 / 12:15 – 13:00 hrs  
Venue/Room: Auditorium, Block D

**Consumer-Centric Internet of Things: The Need for Standardization**

Dr. Thinagaran Perumal  
*Universiti Putra Malaysia, Malaysia*

**Biography**

Dr. Thinagaran Perumal is the recipient of 2014 Early Career Award from IEEE Consumer Electronics Society for his pioneering contribution in the field of consumer electronics. He completed his PhD at Universiti Putra Malaysia, in the area of smart technology and robotics. He is currently a Senior Lecturer at the Department of Computer Science, Faculty of Computer Science and Information Technology, Universiti Putra Malaysia. He is also currently appointed as Head of Cyber-Physical Systems in the university and also been elected as Chair of IEEE Consumer Electronics Society Malaysia Chapter. His research interests are towards interoperability aspects of smart homes and Internet of Things (IoT), wearable computing, and cyber-physical systems. His recent research activities include proactive architecture for IoT systems; development of the cognitive IoT frameworks for smart homes and wearable devices for rehabilitation purposes. He is an active member of IEEE Consumer Electronics Society and its Future Directions Committee on Internet of Things. He has been invited to give several keynote lectures and plenary talk on Internet of Things in various institutions and organizations internationally. He has published several papers in IEEE Conferences and Journals and is serving as TPC member for several reputed IEEE conferences. For details, please visit www.tperumal.com.

**Abstract**

The Internet of Things (IoT) is a unique paradigm that shaping the evolution of the future Internet and how we perceive objects around us. The IoT accelerate innovation by creating the means for objects or machines to communicate heterogeneous types of information among themselves and collaborate with peers to provide novel services. The IoT will also empower consumers with smarter environment, enriched healthcare, intelligent transportation solutions and many more important services. Without doubt, most of the IoT technology and applications will directly or indirectly influence consumer industries. To compete in this new reality, consumer companies must now understand how their products are controlled by IoT ecosystems, which means understanding their application strategy, network communication, and architectures as well as the emerging paradigm of big data, security and privacy. Consumers will demand interoperability, because it will make it easy to connect and handle their product purchases and ultimately their daily chores. The IoT initiatives worldwide are mainly concentrated on architectures and protocols for efficient interconnection of heterogeneous objects and the creation of value-added services. Hence, several fundamental aspects and the need for a consumer-centric approach towards the standardization of IoT are necessary to clearly define relationships among IoT’s numerous vertical markets. To honour the Internet connectivity in IoT, there is urgent need to appreciate the nature of resources of public infrastructure and interests. Instead of designing devices limited to one manufacturer, consumer industries need to think of the larger possibilities and this is how standardization comes into the picture. This keynote talk aims to explore those issues involved consumer-centric IoT, their standardization approach as well as to pursue the state-of-the-art and future directions of IoT.
Date/Time: Friday, 9 October 2015 / 09:30 – 10:15 hrs
Venue/Room: Auditorium, Block D

The Rebirth of Computer Vision in the Internet of Things

Dr. Ing. Jagdish Lal Raheja
Digital Systems Group (CEERI), India

Biography
Dr. Ing. Jagdish Lal Raheja obtained his PhD from Technical Univ. Munich, Germany (cartographic generalization) in 2005. He has obtained his M.Tech from IIT Kharagpur, India in 1986. Currently he is a Professor at CSIR-CEERI. He is also a Senior Principal Scientist, Central Electronics Engg. Res. Institute (CEERI), Pilani managing the R & D work in the area of Human Computer Interface, Image Processing and Multi Model Perception. He specializes in Image processing, Pattern Recognition, Perception Engineering, Digital Cartographic Generalization and Artificial Intelligence (AI).

Abstract
Not available at the time of printing.

Date/Time: Friday, 9 October 2015 / 10:15 – 11:00 hrs
Venue/Room: Auditorium, Block D

Green Network Optimisation in Wireless Networks using AI Techniques

Dr. Aduwati Binti Sali
Universiti Putra Malaysia, Malaysia

Biography
Dr. Aduwati is currently an Associate Professor at Department of Computer and Communication Systems, Faculty of Engineering, Universiti Putra Malaysia (UPM) since Dec 2013. She obtained her PhD in Mobile and Satellite Communications form University of Surrey, UK, in July 2009, her MSc in Communications and Network Engineering from UPM, Malaysia, in April 2002 and her BEng in Electrical Electronics Engineering (Communications) from University of Edinburgh, UK, in 1999. She worked as an Assistant Manager with Telekom Malaysia Bhd from 1999 until 2000. She was involved with EU-IST Satellite Network of Excellence (SatNEx) I & II from 2004 until 2009.

She is the principle investigator and collaborator for projects under the local and international funding bodies; namely Malaysian Ministry of Science, Technology and Innovation (MOSTI), Malaysian Ministry of
Education (MoE), Research University Grant Scheme (RUGS) (now known as Putra Initiative Grant) UPM, The Academy of Sciences for the Developing World (TWAS-COMSTECH) Joint Grants, and EU Horizon 2020 Research and Innovation Staff Exchange (H2020-RISE). She gave consultations to Malaysian Ministry of Information and Multimedia, Malaysian Ministry of Education, National Space Agency, ATSB Bhd and Petronas Bhd. on projects related to mobile and satellite communications. Her research interests are radio resource management, MAC layer protocols, satellite communications, wireless sensor networks, satellite-assisted emergency communications and 3D video transmission over wireless networks. In 2014, the fateful event of missing MH370 has requested her to be in printed and broadcasting media, specifically Astro Awani, RTM, TV Al-Hijrah, BERNAMA, Harian Metro and Metro Ahad, regarding analysis on satellite communication in tracking the aircraft.

**Abstract**

Environment quality degradation is a serious challenge facing the modern technologies. Demands for high bandwidth and data rates put wireless communication industry in a leading position as energy demanding industry which contributes in carbon dioxide volume. Therefore, 'Green' wireless network concept has emerged to provide the foundation of energy-efficient wireless network. Base stations in wireless network are considered as the major part responsible for the network power consumption. Hence, the challenge of complying with the green wireless network concept is the compromise between the number of base stations used in the network and meeting the demand of quality of service and coverage. Mainly, estimating the number of base stations in the network is accomplished during the network dimensioning (planning) stage. During this stage, a set of candidate base station locations are identified with a recommended antenna configuration in each candidate location. The main criteria considered in network dimensioning are the network coverage and quality of service. However, attention is also given to the network capacity, user traffic profile, terrain profile and other factors necessary for reliable network operation.

The aim of this work is to optimize the total energy consumption of the wireless network to comply with the green wireless network concept while meeting the requirements of quality of service. To achieve this aim, network plan is optimized to reduce the total energy consumption in the permanent major base stations. In the next step, relay stations are linked to each major base station in the network. Artificial intelligence techniques are used to achieve energy efficient wireless network topology and operation. Multi-objective Genetic Algorithm is developed to optimize the network plan. While fuzzy inference system is introduced to control the state of the relay stations and optimizes the operational energy consumption.

The proposed multi-objective GA optimizes the total energy consumption of the network by selecting the base station locations and configurations from a set of initial locations and configurations provided in the dimensioning stage. In the second stage of this work, network capacity is mitigated by adding a set of relay stations associated with each major base station in the genetic algorithm proposed topology. The proposed multi-objective GA scheme is applied on randomly distributed network and an operator preplanned network. In both topologies, the total transmission power is calculated for the initial plan and for the GA proposed plan. Optimizing the randomly distributed network plan resulted in transmission power saving up to 38% compared to the initial network transmission power. This energy saving is a result of reducing the total number of antenna to 51% of the initial number of antenna assumed. The results of applying the GA on the real preplanned network show that energy saving up to 40% can be achieved by reducing the number of antenna to 60% compared to the initial preplan. In both cases, the coverage probability, received signal strength and signal to noise ratio are maintained in close match to the initial network plan.

The GA optimized plan is considered for the fuzzy blossoming and withering algorithm. A set of relay stations are associated with every base station in the genetic algorithm proposed plan. In both topologies, the randomly distributed network plan and the network operator plan, the blossoming and withering algorithm resulted in accumulative power saving of up to 36% for one week operation compared to the initial plans. The number of relay stations per base station used is linearly related to the energy saving achieved in the proposed scheme.
Date/Time: Friday, 9 October 2015 / 11:30 – 12:15 hrs
Venue/Room: Auditorium, Block D

Title: TBA

Prof. Deepak Garg
*Thapar University, India*

### Biography

**Dr. Deepak Garg**, Chair, IEEE Computer Society, India Council. An astute performer with proven expertise in devising and effectuating policies aimed at ensuring smooth running of operations and execution of academic, research and administration tasks within the professional college/University premises; possesses potential for distinctive achievement through strategy, innovation, implementation and control.

Currently working as a faculty in Computer Science and Engineering Department with Thapar University and having 16 years rich cross-functional experience in continuously delivering in the capacity of teacher and researcher.

Undertaken several prestigious research and consultancy assignments. Hands on experience in guiding B.Tech., M.Tech. and PhD students and producing excellent results.

Esteemed member of several professional organizations, editorial board of various journals and 98 publications to the credit. Conducted many seminars/ conferences/ workshops. He is Chair, IEEE Computer Society India Council and Chair, IEEE Education Society India Council and Chair, ACM SIGACT North India. He is Coordinator of NBA Nodal Center. He has visited Trinity College, Dublin few times for formalizing and executing contemporization program to take the University to next level of excellence. He is an ABET leader and has attended institute for the development of Excellence In Assessment Leadership (IDEAL) Workshop in US. A stickler for quality, team builder to the core and a natural motivator with perseverance and integrity. Commands excellent communication skills that have been honed through interacting with people at various levels.

PhD (Computer Science and Engineering) with expertise of Data Structures, Algorithms and Data Mining.
Date/Time: Friday, 9 October 2015 / 12:15 – 13:00 hrs
Venue/Room: Auditorium, Block D

Green Computing through Adaptive Multi-core Architectures

Dr. Israel Koren
University of Massachusetts, USA

Biography

Dr. Israel Koren is a Professor of Electrical and Computer Engineering at the University of Massachusetts, Amherst and a fellow of the IEEE. He has been a consultant to companies like IBM, Analog Devices, Intel, AMD and National Semiconductors. His research interests include Fault-Tolerant systems, secure cryptographic devices, Computer architecture and computer arithmetic. He publishes extensively and has over 250 publications in refereed journals and conferences. He is the author of the textbook “Computer Arithmetic Algorithms,” 2nd Edition, A.K. Peters, Ltd., 2002, and a co-author of the textbook “Fault Tolerant Systems,” Morgan-Kaufman, 2007.

Abstract

Current multi-cores consist of processors with a static architecture and a fixed set of hardware resources. In contrast, the computational demands of many applications vary not only from one task to the other, but also temporally, during the execution of a single task.

Such high level of diversity results in a mismatch between the requirements of the application and the hardware resources provided by the multi-core, causing an energy inefficient execution.

Computer architects have been aware of this mismatch and proposed the design of asymmetric multi-cores that comprise of cores with different computational capabilities. Such asymmetric designs allow the reassignment of a task from one type of core to another where it can run more efficiently.

However, too frequent reassignments of tasks to cores results in high overhead. This overhead can be greatly reduced by designing a morphable core that can dynamically adapt its resource sizes, operating frequency and voltage to assume one of several possible core configurations. Such a morphable architecture allows more frequent task to core configuration reassignments for a better match between the current needs of the task and the available resources.

Our results indicate that the proposed morphable architecture controlled by a runtime management scheme can improve considerably the throughput/Watt over executing on a standard out-of-order multi-core.
**Date/Time:** Saturday, 10 October 2015 / 09:00 – 09:45 hrs  
**Venue/Room:** Auditorium, Block D  

**Towards Multi-modal Cognitive Autonomous Systems**

Prof. Dr. Amir Hussain  
*University of Stirling, Scotland, UK*

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**Biography**

Dr. Amir Hussain obtained his BEng (with the highest 1st Class Honours) and PhD (in novel neural network architectures and algorithms) from the University of Strathclyde in Glasgow, UK, in 1992 and 1997 respectively. Following a Research Fellowship at the University of Paisley, UK (96-98), and a research Lectureship at the University of Dundee, UK (98-00), he joined the University of Stirling in 2000, where he is currently Professor of Computing Science, and founding Director of the Cognitive Informatics Research Laboratory. He has authored over 260 publications (including over a dozen Books and 80+ journal papers); conducted and led collaborative research with industry; partnered in major European research programs, and supervised more than 20 PhDs. He is an Associate Editor of the IEEE Transactions on Neural Networks and Learning Systems, founding Editor-in-Chief of Springer’s Cognitive Computation journal, Springer/BioMed Central’s Big Data Analytics journal, SpringerBriefs in Cognitive Computation and the Springer Book Series on Socio-Affective Computing. He holds several Visiting Professorships and serves as an International Advisor to various Governmental Higher Education and Research Councils, Universities and Companies. He has served as invited/keynote speaker, general/program/organizing (co)chair for over 50 international conferences and workshops, including IEEE WCCI, IJCNN, IEEE SSCI etc. He is a member of several Technical Committees of the IEEE Computational Intelligence Society (CIS), founding publications co-Chair of the INNS Big Data Section and its annual INNS Conference on Big Data, and Chapter Chair of the IEEE UK & RI Industry Applications Society.

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**Abstract**

Cognitive computation is an emerging discipline linking together neurobiology, cognitive psychology and artificial intelligence. Research in cognitive computation can promote a more comprehensive and unified understanding of diverse topics, including those related to perception, action, attention, learning and memory, decision making, language processing, communication, reasoning, problem solving and consciousness aspects of cognition.

The interdisciplinary field of autonomous vehicle control (AVC) is a rapidly growing one which promises improved performance, fuel economy, autonomy, intelligence, comfort and safety, in next-generation smart cars. One particularly promising alternative to AVC is to break the mission into a set of sub-tasks, each valid over a restricted range of conditions, and to switch between them when required. The problem of selecting from amongst a set of actions or behaviours is also a central problem for animals. There is growing evidence that a set of central brain nuclei - the basal ganglia (BG) - are used by all vertebrates to seamlessly solve this problem. Given the similarity between the problem’s domains of AVC and action selection in animals, this challenging research aims to leverage new results from psychology and neurobiology and apply them to AVC.

In this talk, a novel modular cognitive control framework for autonomous systems is presented that could potentially realize the required cognitive action-selection and learning capabilities in our envisaged cognitive machine. In the proposed framework, the BG as a central ‘action-selection’ mechanism in the brain is exploited as the basis of novel BG-based ‘soft-switching’ and ‘dual process’ (automatic and controlled or executive) processing mechanisms. An ongoing case study in autonomous vehicle control is described, as a benchmark problem, with encouraging preliminary results, with significant potential implications for both fuel and emission economy, in a range of realistic driving scenarios, such as adaptive cruise control, general path trajectory tracking, lane changes and parallel parking. Current work is focused on extending the cognitive control framework to
incorporate dynamic allocation of controllers, on-line learning of salience weights to the BG model, and use of a variable length horizon (as a possible sensorimotor form of chunking) to implement a psychologically motivated dual-process scheme for motion planning and control.

Finally, possible future avenues are explored, including our ongoing work aimed at developing a general modular cognitive framework incorporating multiple modalities, including vision, motor action, language and emotion, required for enabling multi-modal social cognitive and affective behavioral capabilities in future autonomous vehicles.

Date/Time: Saturday, 10 October 2015 / 09:45 – 10:30 hrs
Venue/Room: Auditorium, Block D

MCTS application to Dynamic Vehicle Routing

Dr. Jacek Mandziuk
Warsaw University of Technology, Poland

Abstract
Vehicle Routing Problem (VRP), along with its numerous variants, is a widely known combinatorial optimization task. Its practical (industrial and business) background and relevance stimulate strong ongoing interest...
within Artificial Intelligence/Computational Intelligence community in finding new efficient methods for solving it, despite some already existing heuristic and approximate solutions.

The VRP was first formulated in 1959 and subsequently proved to be NP-hard in 1981. In short, the problem consists in assigning a number of homogenous vehicles to a number of clients, where each client has a certain 2D location and a certain demand of homogeneous goods and the goal (optimization objective) is to deliver demanded goods to all clients while minimizing the sum of vehicles routes’ costs. There are a few additional constraints which must be fulfilled, i.e. each customer must be served by exactly one vehicle and each vehicle’s route must start and end in the specified depot. The basic formulation of VRP does not impose any limit on the number of clients that can be served by a given vehicle. For practical reasons, however, the upper limit on vehicles’ capacity is often imposed, leading to the Capacitated Vehicle Routing Problem (CVRP) definition.

Since VRP/CVRP is NP-Hard, no polynomial method of solving the problem is known and perfect solutions can only be obtained for relatively small-size problems. For the real-life problem instances approximation algorithms must be applied, most of them designed to address specific problem formulations, e.g. Savings algorithm, Multi-route improvement algorithm, Sweep algorithm, Ant Colony Optimization or Particle Swarm Optimization.

The talk will begin with a brief introduction to the VRP domain and subsequently present in more detail a particular variant of CVRP called CVRP with Traffic Jams (CVRPwTJ), which differs significantly from the above-mentioned static versions due to introduction of a high degree of uncertainty by means of traffic jams (TJ), which may stochastically occur on particular edges (atomic parts) of the planned vehicles’ routes. The existence of a traffic jam increases the cost of traversing a certain edge, usually to the extent that requires some re-modeling of the currently planned route. In the presented approach, these dynamic changes are handled on-line by appropriate actions taken to alleviate their impact. The solution method sketched during the talk relies on the variant of the Monte Carlo Tree Search algorithm known as Upper Confidence Bounds applied to Trees (UCT) method. The main advantage of using UCT is its high on-line adaptability and its “knowledge-free” nature - there is no requirement for domain-specific knowledge, except for the formal problem definition. The efficiency of the proposed approach will be compared with Ant Colony Systems (ANT) and three versions of Genetic Algorithms (GA) indicating the upper-hand of the UCT method.
Technical Programme — Day 1: Thursday, 8 October 2015

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| 10.45 – 11.30 hrs  | Inaugural Keynote 1
  
  Date / Time: 10.45 – 11.30 hrs
  Title/By: Digital Monozukuri for Open Innovation by Dr. Aynur Unal, Stanford University, USA
  Venue: Auditorium, Block D
  Chair: Dr. Katina Michael, University of Wollongong, Australia |
| 11:30 – 11:45      | Tea/Coffee Break                                                     |
| 11.45 – 12.30 hrs  | Keynote 2
  
  Date / Time: 11.45 – 12.30 hrs
  Title/By: Justifying Ubervillance — The Internet of Things and the Flawed Sustainability Premise by Dr. Katina Michael, University of Wollongong, Australia
  Venue: Auditorium, Block D
  Chair: Prof. Dr. Aynur Unal, Stanford University, USA |
| 12.30 – 13.15 hrs  | Keynote 3
  
  Date / Time: 12.30 – 13.15 hrs
  Title/By: Consumer-Centric Internet of Things: The Need for Standardization by Dr. Thinagaran Perumal, Universiti Putra Malaysia, Malaysia
  Venue: Auditorium, Block D
  Chair: Prof. Dr. Aynur Unal, Stanford University, USA |
| 13:15 – 14:00      | Lunch                                                                 |

Session 1.1 – Green Computing (1) [Parallel]

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<td>Chair(s)</td>
<td>Dr. Thinagaran Perumal, Universiti Putra Malaysia, Malaysia</td>
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197 Analysis of an Efficient Partial Product Reduction Technique
Keerti Vyas, Ginni Jain, Vijendra K. Maurya, Anu Mehra
Presenting Author: Keerti Vyas — GITS, India

267 Comparative Power Analysis of CMOS & Adiabatic Logic Gates
Himanshi Sharma, Rajan Singh
Presenting Author: Himanshi Sharma — Noida Institute of Engineering Technology, India
732 Critical Analysis of Cross-Layer Approach  
G. N. Vivekananda, P. Chenna Reddy  
Presenting Author: G. N. Vivekananda — JNTUA College of Engineering, India

283 Assistive Technology for Dyslexic using Accelerometer based Hand Writing Recognition and Analog IVRS  
Gaurav Srivastav, Anshita Agarwal  
Presenting Author: Anshita Agarwal — JSS Academy of Technical Education, India

478 Automatic Extraction of Blood Vessels and Veins using Laplace Operator in Fundus Image  
Jiri Minar, Marek Pinkava, Kamil Ríha, Malay Kishore Dutta, Namita Sengar  
Presenting Author: Namita Sengar — Amity University, India

656 Comparative analysis of Contrast Enhancement Techniques on different Images  
Pushpa Mamoria, Deepa Raj  
Presenting Author: Pushpa Mamoria — Babasaheb Bhimrao Ambedkar University, India

444 Realization of OFDM based Free Space Optics  
Raminderjeet Singh, Gaurav Soni  
Presenting Author: Raminderjeet Singh — Amritsar College of Engineering & Technology, India

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<th>Session</th>
<th>1.2 – Power-aware Algorithms and Protocols (1) [Parallel]</th>
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<td>Dr. Sangharatna Godboley, National Institute of Technology, Rourkela</td>
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814 GreenJEX: A New Tool to Measure Energy Consumption of Improved Concolic Testing  
Sangharatna Godboley, Arpita Dutta, Bhagyashree Besara, Durga Mohapatra  
Presenting Author: Sangharatna Godboley — National Institute of Technology, Rourkela

806 Enhanced Power Quality of MLI using PSO based Selective Harmonic Elimination  
Vinothkumar N  
Presenting Author: Vinothkumar N — Central Power Research Institute

777 A Low Energy Consumed Routing Multipath Protocol In MANETS  
Sumant Kumar Mohapatra, Sushil Kumar Mahapatra, Sukant Behera, Lalit Kanoje  
Presenting Author: Sukant Behera — CET, India

568 Cut-based Classification for User Behavioral Analysis on Social Websites  
Amol P. Bhagat, Kiran A. Dongre and Priti A. Khodke  
Presenting Author: Priti A. Khodke — Prof Ram Meghe College of Engineering and Management, India

536 FACTS Devices for Stability Enhancements  
Sajan Varma, Akhilesh A. Nimje  
Presenting Author: Sajan Varma — Ferozepur College of Engineering & Technology, India

778 An Experimental Analysis of Penetration Loss around Buildings of an Institution  
Sushil Mahapatra, Sumant Mohapatra, Sukant Behera, Lalit Kanoje  
Presenting Author: Sumant Kumar Mohapatra — Trident Academy of Technology, India
### Session 1.3 – Eco-friendly Computing & Communication Resources (1)

**Date/Time** Thursday, 8 October 2015 / 14:00 – 15:30

**Venue** 006, Ground Floor, Block E

**Chair(s)** Dr. Sajaivir Singh, *J. P. Institute of Information Technology, Noida*

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<td>Presenting Author: Akshay Nara — <em>Sandip Institute of Technology and Research Centre, India</em></td>
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<td>828</td>
<td>Air Cannon Based Electronic Lifeguard System</td>
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<td>Area Optimized Implementation of Unsymmetric Trimmed Adaptive Median Filter for Edge Preservation on FPGA</td>
<td>A. Lole Bhagwashi, A. C. Pise, S. V. Surwase</td>
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<td>Presenting Author: A. Lole Bhagwashi — <em>SKN Sinhgad College of Engineering, India</em></td>
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<td>Presenting Author: Prajakta Chaudhari — <em>Savitribai Phule Pune University, India</em></td>
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<td>GPS Supported City Bus Tracking &amp; Smart Ticketing System</td>
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<td>Presenting Author: Suvarna Sanap — <em>Sandip Institute of Technology and Research Center, India</em></td>
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<td>Cascaded DNA Cryptography and Steganography</td>
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<td>Comparison of Significant Issues in Multicore Cache Coherence</td>
<td>Amit D. Joshi, N. Ramanabramanain</td>
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<td>Presenting Author: Amit D. Joshi — <em>National Institute of Technology, India</em></td>
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### Session 1.4 – Internet of Things (1)

**Date/Time** Thursday, 8 October 2015 / 14:00 – 15:30

**Venue** 009, Ground Floor, Block E

**Chair(s)** Prof. Subarna Shakya *Tribhuvan University, Nepal*

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<td>A Mobility Analytics Framework for Internet of Things</td>
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<td>Presenting Author: Mukesh Taneja — <em>Cisco Systems, India</em></td>
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<td>ATM based WMN Architecture for Distributed Generation Systems in Electrical Networks</td>
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<td>Presenting Author: S. V. Vambase — <em>BLDEA’s S. B. A &amp; KCP Science College, India</em></td>
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<td>739</td>
<td>Performance Analysis of EPON Link Using OSSB &amp; ODSB</td>
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<td>Presenting Author: Gaurav Soni — <em>Amrisar College of Engineering &amp; Technology, India</em></td>
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A Review on Desirable Measures for Good Key Pre-distribution Scheme in Wireless Sensor Network
Monjul Saikia, Irani Acharjamayum, A. Hussain
Presenting Author: Irani Acharjamayum — NERIST, India

Analysis of Computer Vision and sensor technologies to assist the Visually Impaired
Amit Singh, Abhishek Thakur, Ankur Taparia
Presenting Author: Amit Singh — Delhi Technological University, India

Design and Implementation of Low Power, Cost Effective Human Machine Interface by Left and Right Eye Movement Technique
A. Saravanan, Silpa Ajith Kumar
Presenting Author: A. Saravanan — Coeo Labs Pvt. Ltd., India

5G Technology: Revolution of Future Communication Technology
Sanjay Kumar, Gagan Gupta, Kunwar Rajat Singh
Presenting Author: sanjay Kumar — Galgotias College of Engineering & Technology, India

Location aware Sector-based Routing in Wireless Ad hoc Networks
Shweta R. Malwe, G. P. Biswas
Presenting Author: Shweta R. Malwe — Indian School of Mines, India

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Session 1.5 – Networking and Communication Protocols (1) [Parallel]

Date/Time: Thursday, 8 October 2015 / 14:00 – 15:30
Venue: 010, Ground Floor, Block E
Chair(s): Dr Muneesh Trivedi Academy of Business & Engineering Sciences, India

- Review and Analysis of Photonic Crystal Beam Splitter for Optical Communication Applications
  Juhi Sharma, Ritu Sharma, Lalit Dusad
  Presenting Author: Juhi Sharma — Government Engineering College Ajmer From Rajasthan Technical University Kota, India

- An Inset Fed Patch Antenna With a Modified Slot for WLAN and WiMAX Applications
  Nishant Kaul, Sohaib Bhat, Anchal Gupta, Shalini Sah
  Presenting Author: Nishant Kaul — A.S.E.T. Amity University, India

- A Survey on Fault Tolerance Techniques in Wireless Sensor Networks
  Gholamreza Kakamanshadi, Savita Gupta, Sukhwinder Singh
  Presenting Author: Gholamreza Kakamanshadi — UIET, Panjab University, India

- A Novel Symmetric Key Encryption Technique using Cellular Automata
  Deepika Parashar, Satyabrata Roy, Vipin Jain
  Presenting Author: Deepika Parashar — S.K.I.T., India

- A Framework for Network Assisted HTTP ABR Video Streaming in LTE-WLAN Networks
  Mukesh Taneja
  Presenting Author: Mukesh Taneja — Cisco Systems, India

- Analysis of Various Clock Recovery Methods for IP Set- Top Box
  Monika Jain, Usha Tiwari
  Presenting Author: Monika Jain — Galgotias College of Engineering & Technology, India

- An Effective Model for Anomaly IDS to Improve the Efficiency
  Anita S. Chordia, Sunil Gupta
  Presenting Author: Anita S. Chordia — Kota University, India
281  Performance Analysis of DFS based Ordered Walk Learning Routing Protocol in MANET  
Balram Swami, Ravinder Singh  
Presenting Author: Balram Swami — Govt. Engineering College, India

266  Simulation Based Comparison between OWL and AODV  
Balram Swami, Ravinder Singh  
Presenting Author: Balram Swami — Govt. Engineering College, India

15:30 – 16:00 Tea/Coffee Break

Session 2.1 – Sensor Webs (1) [Parallel]  

Venue 004, Ground Floor, Block E  
Chair(s) Mr. Ashok Kr Chauhan, General Manager, Noble System, India

323  A Novel Cluster Head Selection Scheme Using Fuzzy Logic in Wireless Sensor Networks  
Ajai Kumar Mishra, Rakesh Kumar, Jitendra Singh  
Presenting Author: Ajai Kumar Mishra — Madan Mohan Malviya University of Technology, India

253  An Efficient Implementation of Multi Matrix Clocks in the Distributed System  
Avaneesh Singh, Neelendra Badal  
Presenting Author: Avaneesh Singh — Kamla Nehru Institute of Technology, India

584  A Scheme for Patient Study Retrieval from 3D Brain MR Volumes  
Mangipudi Partha Sarathi, M. A. Ansari  
Presenting Author: Mangipudi Partha Sarathi — Amity University, India

398  ARTQS: An Advanced Real-Time Query Scheduling Approach in Wireless Sensor Networks  
Bibudhendu Pati, Joy Lal Sarkar, Chhabi Rani Panigrahi, Mayank Tiwary  
Presenting Author: Joy Lal Sarkar — C.V Raman College of Engineering, India

581  Detecting and Overcoming Blackhole Attack in Mobile Adhoc Network  
Sakshi Jain, Ajay Khuteta  
Presenting Author: Sakshi Jain — Poornima College of Engineering, India

148  A 0.25 µm SCVL Based 4T DRAM Design for Minimizing Leakage Current Using CMOS Technology  
Sarang Kulkarni, Neha Rai  
Presenting Author: Sarang Kulkarni — Pillai HOC College of Engineering, India

560  Energy Efficient Fault-Tolerant Clustering Algorithm for Wireless Sensor Networks  
Kumar Nitesh, Md Azharuddin, Prasanta K. Jana  
Presenting Author: Kumar Nitesh — Indian School of Mines, India

442  Performance Analysis of OTDM Link at 40 Gbps  
Tajinder Kaur and Gaurav Soni  
Presenting Author: Tajinder Kaur — Amritsar College of Engineering & Technology, India

Session 2.2 – Big Data and Analytics (1) [Parallel]  

Venue 005, Ground Floor, Block E  
Chair(s) Nilanjan Bandyopadhyay Sr. Business Consultant, Dessault Systems, Gurgoan, India

327  An Optimized Cloud Based Big Data Processing Mechanism Using Self-Organizing Map in Hadoop Environments  
Girish Neelakanta Iyer, Salaja Silas, Ganesh Neelakanta Iyer  
Presenting Author: Girish Neelakanta Iyer — Aryanet Institute of Technology, India
264 An Efficient User Oriented Permanent Deletion Scheme for Cloud Object Storage  
J. Sharon Moses, L. D. Dhinesh Babu  
Presenting Author: J. Sharon Moses — VIT University, India

762 Big Data Analytics for Health Systems  
Vikash Yadav, Monika Verma, Vandana Dixit Kaushik  
Presenting Author: Vikash Yadav — Harcourt Butler Technological Institute, India

379 Business model innovation through Big Data  
Rashi Chaudhary, Prakhar Pandey, Jalaj Ranjan Pandey  
Presenting Author: Prakhar Pandey — Krishna Institute of Engineering and Technology, India

783 Big Data Analytics Techniques: A survey  
Poonam Vashisht, Vishal Gupta  
Presenting Author: Poonam vashisht — UIET, Panjab University, India

627 Design of a Low Power Adiabatic Logic based Johnson Counter  
Himanshi Sharma, Rajan Singh  
Presenting Author: Himanshi Sharma — Nite greater noida, India

108 An Efficient Implementation of Matrix Clocks in the Distributed Computing Environment  
Avaneesh Singh, Neelendra Badal  
Presenting Author: Avaneesh Singh — Kamla Nehru Institute of Technology, India

160 A Survey on Big Data Storage Strategies  
Gazal, Pankaj Deep Kaur  
Presenting Author: Gazal — Guru Nanak Dev University Regional Campus, India

797 An Overview of Hybrid Databases  
Saumya Goyal, Pragati Prakash Srivastava, Anil Kumar  
Presenting Author: Anil Kumar — Mody University of Science and Technology, India

---

**Session 2.3 – Image Processing & Pattern Recognition (1)**

**Date/Time**: Thursday, 8 October 2015 / 16:00 – 18:00

**Venue**: 006, Ground Floor, Block E

**Chair(s)**: Dr Dhiraj Gupta, Hi-tech Institute of Technology, Ghaziabad, India

51 A Weighted Semantic Feature Expansion using Hyponymy Tree for Feature Integration in Sentiment Analysis  
Jeevanandam Jotheeswaran and S. Koteeswaran  
Presenting Author: Jeevanandam Jotheeswaran — SR Technic University, India

811 A Generalized Contrast Enhancement Algorithm for Seamless High Contrast Image Across Devices in Internet of Things  
Ghanapriya Singh  
Presenting Author: Ghanapriya Singh — National Institute Of Technology, India

361 Bilateral Filter for Image Denoising  
Priyanka D. Patil, Anil D. Kumbhar  
Presenting Author: Priyanka Patil — Smt. Kashibhai Navale College of Engineering, India

353 Attendance System Based on Face Recognition Using Eigen Face and PCA Algorithms  
Priyanka Wagh, Jagruti Chaudhari, Roshani Thakare, Shiveta Patil  
Presenting Author: Priyanka Wagh — Sandip FoundationAcadémie S.I.T.R.C., India

374 Comparative Analysis of K-Means with other Clustering Algorithms to Improve Search Result  
Shashi Mehrotra, Shruti Kohli  
Presenting Author: Shashi Mehrotra — Birla Institute of Technology, India
Day 1: Thursday, 8 October 2015

280 Comparative Analysis of Contrast Enhancement Techniques with Fuzzy Logic
Pushpa Mamoria, Deepa Raj
Presenting Author: Pushpa Mamoria — Babasaheb Bhimrao Ambedkar University, India

117 Clustering of Breast Cancer Tumor using Third order GLCM Feature
Vrushali Gaikie
Presenting Author: Vrushali vinayak Gaikie — Dr.B.A.M. University, India

289 Implementation of Pattern Discovery to Retrieve Relevant Document Using Text Mining
Shivani Gupta, B. P. Vasgi
Presenting Author: Shivani Gupta — Sinhgad College of Engineering, India

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<td>2.4 – Cloud Computing (1)</td>
<td>Thursday, 8 October 2015 / 16:00 – 18:00</td>
<td>009, Ground Floor, Block E</td>
<td>Prof. Durga Prasad Mohapatra, National Institute of Technology Rourkela, India</td>
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</table>

745 A Knowledge Based Indian Agriculture: With Cloud ERP Arrangement
Tameem Ahmad, Shamim Ahmad, Mohammed Jamshed
Presenting Author: Tameem Ahmad — Aligarh Muslim University, India

129 A Novel Cryptographic and Steganographic Approach for Secure Cloud Data Migration
Ankit Dhamija, Vijay Dhaka
Presenting Author: Ankit Dhamija — Jaipur National University, India

612 An Approach for IoT based Car Parking and Reservation System on Cloud
Vaibhav Hans, Parminder Sethi, Jatin Kinra
Presenting Author: Vaibhav Hans — University of Petroleum & Energy Studies

506 A Hybrid Scheme for Anonymous Authentication of Data Storage in Cloud
M. Balasingh Moses, K. Ambika
Presenting Author: M. Balasingh Moses — Anna University, India

299 Acceleration of CUDA Programs for Non-GPU Users Using Cloud
Tejas Pisal, Sandip Walunj, Aslam Shrimali, Omprakash Gautam, Lalit Patil
Presenting Author: Tejas Pisal — Sandip Institute of Engineering and Research Center, India

247 A Latency Reduction Mechanism for Virtual Machine Resource Allocation in Delay Sensitive Cloud Service
Rahul Kumar Sharma, Pragya Kanal, Saro Pal Singh
Presenting Author: Rahul Kumar Sharma — Madan Mohan Malaviya University of Technology, India

815 Cloud Enabled and Cluster based Efficient Data Broadcasting in VANETs
Mohd Umar Farooq, Mohammed Pasha, Khadeel-Ur-Rahman Khan
Presenting Author: Mohammed Umar Farooq — Muffakham Jah College of Engineering and Technology, India

506 Web Service Selection/Composition based on PSOA: A Review
Arnab Paul, Laishram Jenny Chanu, Sangeeta Kalita
Presenting Author: Laishram Jenny Chanu — Assam University, India
181 Mobile-Cloud Driven Conditional Monitoring System – A Practical Perspective
Manasvi Jain, Seshu Babu Tolety, Hemadri Pavan Kumar Nanyam, Pinku Hazarika, Sanath Shenoy
Presenting Author: Hemadri Pavan Kumar Nanyam — Siemens Technologies and Services Private Limited, India

609 A Theoretical Model to Improve Capability in CSL for Multi-Tier Applications in Saas Environment
T. A. Swetha Margaret, Ananthi Sheshasaayee
Presenting Author: T. A. Swetha Margaret — Quaid-E-Millath Government College for Women, India

**Session**
**Date/Time**
Thursday, 8 October 2015 / 16:00 – 18:00

**Venue**
010, Ground Floor, Block E

**Chair(s)**
Er. Nikhil L. Kulkarni, Sandip Institute of Technology & Research Centre, Nashik

545 Hybrid Ensemble of Classifiers using Voting
Isha Gandhi, Mrinal Pandey
Presenting Author: Isha Gandhi — Manav Rachna College of Engineering, India

780 A Text Based Decision Tree Model for Stock Market Forecasting
S. S. Panigrahi, J. K. Mantri
Presenting Author: S. S. Panigrahi — North Orissa University, India

174 EEG Monitored Mind De-Stressing Smart Phone Application using Yoga and Music Therapy
Gautham Raj Vijayaragavan, K. P. Phani, R. L. Raghav, Vivek Vaidyanathan
Presenting Author: Vivek Vaidyanathan — SRM University, India

258 Latent Semantic Analysis (LSA) Based Object Recognition and Clustering
Vinaykumar Hebballi, Vidhu Rojit
Presenting Author: Vinaykumar Hebballi — PES Institute of Technology, India

537 Design and Analysis of Rectangular Microstrip Patch Antenna using Metamaterial for WLAN Application at 2.4 GHZ
Rekha Kumari Bagri, Santosh Meena
Presenting Author: Rekha Kumari Bagri — Govt. Mahila Engineering College, India

562 Odour Classification and Detection
Poonam Patil
Presenting Author: Poonam Patil — AICTE

508 A Rough Set based Reasoner for Medical Diagnosis
Heba Ayeldeen, Kaveem Kamal A. Ghanhy, Hossam M. Zawbaa, Olfat Shaker
Presenting Author: Heba Ayeldeen — Faculty of Computers and Information, Cairo University, Egypt

An RSA Based Certificateless Signature Scheme for Wireless Sensor Networks
Jitendra Singh, Vimal Kumar, Rakesh Kumar
Presenting Author: Jitendra Singh — Madan Mohan Malaviya University of Technology, India
370 Designing a Technique for detecting intrusion based on modified Adaptive Resonance Theory Network
Mukul Chauhan, Abhay Pratap, Sonika, Anurag Dixit
Presenting Author: Mukul Chauhan — Galgotias University, India

663 Design of Digit Serial FIR Filter for Power Optimization
Samidha Shirish Pusegaonkar, Vipin S. Bhure
Presenting Author: Samidha Shirish Pusegaonkar — G. H. Raisoni Academy of Engineering and Technology, India

328 Design and Implementation of Modules to Prevent Tampering in Monitoring System to Enhance Security
Abhay Pratap, Mukul Chauhan, Sonika, Anurag Dixit
Presenting Author: Abhay Pratap — Galgotias University, India

753 Sentences and Circumplexes: Prediction of Human Behaviour and Human Emotional States in Social Media
Navanshu Rastogi
Presenting Author: Navanshu Rastogi — Galgotias College of Engineering and Technology, India

316 Flexible Wound Assessment System for Diabetic Patient using Android Smartphone
Nikhil Didolkar, Ashish Bhelonde, Shubham Jangle, Nikhil Kulkarni
Presenting Author: Nikhil Didolkar — Sandip Institute of Technology and Research Centre, India

816 Design and Implementation of Enhanced MQS Algorithm
Gurmeet Kaur, Rajeev Kumar Bedi, Sunil Kumar Gupta
Presenting Author: Gurmeet Kaur — BCET Gurdaspur, India

139 Design and Implementation of Control of Solid State Relay Switches using MSP 430 for Instantaneous High Current Supply
Presenting Author: T. K. Smitha — KSSEM, India

427 Machine Learning Approaches on Map Reduce for Big Data Analytics
J. V. N. Lakshmi, Ananthi Sheshasaayee
Presenting Author: J. V. N. Lakshmi — SCSVMV University, India

296 Smart Centralized Power Control for Buildings Using WSN
Aarti Dhadiwal, Payal Disoja, Priyanka Davande, Tejasree Patil, Amit H. Palve
Presenting Author: Aarti Dhadiwal — Sandip Institute of Technology and Research Center Sandip Foundation, India

206 Three Step Data Security Model for Cloud Computing based on RSA and Steganography Techniques
Vinay Kumar Pant, Jyoti Prakash, Anshuman Saurabh
Presenting Author: Vinay Kumar Pant — Subharti Institute of Technology and Engineering, India
### Technical Programme — Day 2: Friday, 9 October 2015

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<td>08:00 onwards</td>
<td>Conference Registration</td>
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| 09.30 – 10.15 hrs | The Rebirth of Computer Vision in the Internet of Things  
by Dr. Ing. Jagdish Lal Raheja, *Digital Systems Group (CEERI), India* | Auditorium, Block D          | Dr. Katina Michael, *University of Wollongong, Australia* |
| 10.15 – 11.00 hrs | Green Network Optimisation in Wireless Networks using AI Techniques  
by Dr. Aduwati Biniti Sali, *Universiti Putra Malaysia, Malaysia* | Auditorium, Block D          | Dr. Katina Michael, *University of Wollongong, Australia* |
| 11:00 – 11:30 | Tea/Coffee Break                                                          |                              |                                            |
| 11.30 – 12.15 hrs | TBA  
by Prof. Deepak Garg, *Thapar University, India* | Auditorium, Block D          | Dr. Aduwati Biniti Sali, *Universiti Putra Malaysia, Malaysia* |
| 12:15 – 13:00 hrs | Green Computing through Adaptive Multi-core Architectures  
Dr. Israel Koren, *University of Massachusetts, USA* | Auditorium, Block D          | Dr. Aduwati Biniti Sali, *Universiti Putra Malaysia, Malaysia* |
<p>| 13:00 – 14:00 | Lunch                                                                   |                              |                                            |</p>
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<th>3.1 – Data Mining (1)</th>
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<td>Venue</td>
<td>004, Ground Floor, Block E</td>
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<tr>
<td>Chair(s)</td>
<td>Dr. Bhawna Mallick, Galgotias College of Engineering &amp; Technology, GCET, India</td>
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<tr>
<th>Invited</th>
<th>A survey on data mining approaches for dynamic analysis of Malwares</th>
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<tr>
<td>Presenter</td>
<td>Dushyant Kumar Singh, Kshitij Shah</td>
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<td>Organization</td>
<td>Motilal Nehru National Institute of Technology Allahabad, India</td>
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| Date/Time | Friday, 9 October 2015 / 14:00 – 15:30 |
| Venue | 005, Ground Floor, Block E |
| Chair(s) | Dr. Arun Sharma, Indira Gandhi Delhi Technical University for Women, Delhi, India |

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<th>Blood Donor’s Safety Using Data Mining</th>
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<tr>
<td>Presenter</td>
<td>Rohini Patil, Pooja Pawar, Madhu Poi, Tejasree Patil, Namrata Ghuse</td>
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<td>Organization</td>
<td>Savitribai Phule Pune University, India</td>
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<tr>
<td>Presenter</td>
<td>Sanjay Kumar Darivedi, Bhupesh Rawat</td>
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<tr>
<th>Invited</th>
<th>Comparative Analysis of Bagging, Stacking and Random Subspace Algorithms</th>
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<tr>
<td>Presenter</td>
<td>Pooja Shrivastava, Manoj Shukla</td>
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<tr>
<th>Invited</th>
<th>Automatic Detection of Diabetic Retinopathy Using Image Processing and Data Mining Techniques</th>
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<tr>
<td>Presenter</td>
<td>Ketki Argade, Kshitija Deshmukh, Madhura Narkhede, Nayan Sonawane, Sandeep Jore</td>
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<th>Invited</th>
<th>Smart Web Miner - Extending Web Browser with Mining framework based on User Behavior &amp; Web-of-Thing Patterns</th>
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<td>Presenter</td>
<td>Priyesh Lakar, Suyambulingam Rathinasamy Muthupandi, Siba Samal, Niranjan Patil</td>
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<td>Samsung R&amp;D Institute Bangalore</td>
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<th>Analysis of Various NoSql Database</th>
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<td>Presenter</td>
<td>Pragati Prakash Srivastava, Sunaya Goyal, Anil Kumar</td>
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<td>Motilal Nehru National Institute of Technology Allahabad, India</td>
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<tr>
<th>Invited</th>
<th>Enhancing Game Tree Search Using GPGPU</th>
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<tr>
<td>Presenter</td>
<td>Kajal Mahale, Madhuri Desale, Prachi Kapadnis, Shital Kanaskar, S. M. Walton</td>
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<td>Organization</td>
<td>Motilal Nehru National Institute of Technology Allahabad, India</td>
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</table>
567 E-readiness To Implement E-government: An overview study in HR domain in Nepal
Shreedhar Marasini, Subarna Shakya
Presenting Author: Shreedhar Marasini — Singhania University, India

392 Scaling GMM Expectation Maximization Algorithm Using Bulk Synchronous Parallel Approach
Abhay Ratnaparkhi, Emmanuel Pilli, Ramesh Joshi
Presenting Author: Abhay Ratnaparkhi — Graphic Era University, Dehradun, India

367 Transforming a Website from Desktop to Mobile: A Cross Platform Viewpoint
B. Leeladevi, Pinku Hazarika, Hemadri Pavan Kumar Nanyam
Presenting Author: Hemadri Pavan Kumar Nanyam — Siemens Technology and Services, India

142 Big Database Stores A Review on Various Big Data Datastores
Koshy George, Tessy Mathew
Presenting Author: Koshy George — Mar Baselios College of Engineering and Technology, India

459 A Modern Data Architecture with Apache Hadoop
Tripty Singh, V. S. Darshan
Presenting Author: V. S. Darshan — Amrita school of engineering, India

502 Wrist Pulse Gripper System
Faijan Mafat, Bhaskar Thakker
Presenting Author: Faijan Mafat — G. H. Patel College of Engineering & Technology, India

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<tr>
<td>3.3 - Networking and Communication Protocols (2)</td>
<td>Friday, 9 October 2015 / 14:00 – 15:30</td>
<td>006, Ground Floor, Block E</td>
<td>Dr. Rajan Anand Malik, JIMS Engineering College, Greater Noida, India</td>
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469 A Novel Approach to Enhance Security In WEP
Ashish Garg
Presenting Author: Ashish Garg — Center For Development of Advance Computing, India

820 Optimizing Power Consumption in IoT based Wireless Sensor Networks using Bluetooth Low Energy
Karan Nair, Janhavi Kulkarni, Mansi Warde, Zalak Dave, Vedashree Rawalgaonkar, Ganesh Gore, Jonathan Joshi
Presenting Author: Karan Nair — Eduvance, India

702 Evaluating System Performance for handling scalability challenge in SDN
Avantika Kondel, Anita Ganpati
Presenting Author: Avantika Kondel — Himachal Pradesh University, India

648 CAP to DIAMETER Protocol Converter
G. S. Pallavi, Mohana, H. V. Ravish Aradhya
Presenting Author: G. S. Pallavi and Mohana — R. V. College of Engineering, India

699 Comparative Performance Analysis of MANET Routing Protocols in Military Operation Using NS2
Sandhya Katiyar, Rajneesh Gujral, Bhawna Mallick
Presenting Author: Sandhya Katiyar — GCET, India

332 Implementation of Cluster Based Certificate Revocation in Mobile Ad Hoc Networks
Megha R. Jarang, M. V. Nimbalkar
Presenting Author: Megha R. Jarang — Sinhgad College of Engineering, India

287 An Aid Towards the Health Examination of Structures using Wireless Sensor Network
Nilesh Jha, Varsha Kawale, Chandni Kathuriya, Suraj Bhagat, Amit Palve
Presenting Author: Nilesh Jha — Sandip Institute of Technology and Research Center, India
Cluster Based Route Discovery Technique for Routing Protocol in MANET
Poonam Thakur, Anita Ganpati
Presenting Author: Poonam Thakur — Himachal Pradesh University, India

A Survey of Various Approaches to Detect Selfishness in Wireless Ad-hoc Networks
Sachi N. Shah, Ratvij H. Jhaveri
Presenting Author: Sachi N. Shah — SVM Institute of Technology, India

Ad-hoc Vehicle Routing Problem
Tejal Carwalo, Vandana Patil
Presenting Author: Tejal Carwalo — St. Francis Institute of Technology, India

Session 3.4 – Sensor Webs (2) [Parallel]

Date/Time  Friday, 9 October 2015 / 14:00 – 15:30
Venue  009, Ground Floor, Block E
Chair(s)  Er. Nikhil L. Kulkarni, Sandip Institute of Technology & Research Centre, Nashik, India

Improved Tabu SERACH Based Energy Efficient Routing Protocols for Wireless Sensor Networks
Jaspreet Kaur, R. C. Gangwar
Presenting Author: Jaspreet Kaur — Punjab Technical University, India

Data Collection And Analytics Strategies of Social Networking Websites
Sandeep Kumar, Rahul Rishi
Presenting Author: Sandeep Kumar — MD University, India

Multilevel Balanced Distributed Energy Efficient Heterogeneous Protocol for Wireless Sensor Networks
Suman Srivastava, Awadhes Kumar, Anamika Pandey
Presenting Author: Anamika Pandey — Uttar Pradesh Technical University, India

EMS: Enhanced Mobility Scheme for Controlled and Lossy Networks
Riaz A Khan, Ajaz Hussain Mir
Presenting Author: Riaz A Khan — National Institute of Technology, India

Hybrid GSTEB Routing Protocol Using Clustering and Artificial Bee Colony Optimization
Sandeep Kaur, R. C. Gangwar
Presenting Author: Sandeep Kaur — Punjab Technical University, India

Efficient Implementation of UTAMF Algorithm for Edge Preservation on FPGA
A. Lole Bhagyashri, A. C. Pise, S. V. Surwase
Presenting Author: A. Lole Bhagyashri — SKN Sinhgad College of Engineering, India

Acknowledgement Security For MANET using EAACK
Deore Suvarna, Erande Pallavi, Lahane Sumitra, Dhatrak Chhaya, Mahesh Korade
Presenting Author: Lahane Sumitra — Savitribai Phule Pune University, India

A Novel Approach to Improve Intelligent Traffic Management System (ITMS)
Ashish Garg
Presenting Author: Ashish Garg — Center For Development of Advance Computing , India

Energy Efficient Clustering Algorithm for Data Aggregation in Wireless Sensor Network
Binkal S Ahir, Rohan parmar, Bintu kadhiwala
Presenting Author: Binkal S. Ahir — Sarvajanik College of Engineering, India
### Session 3.5: Image Processing & Pattern Recognition (2) [Parallel]

**Date/Time:** Friday, 9 October 2015 / 14:00 – 15:30

**Venue:** 010, Ground Floor, Block E

**Chair(s):** Mr. Hemadri Pavan Kumar N, Siemens Technology and Services Limited, India

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<td>Face Recognition Techniques with Permanent Changes: A Review</td>
<td>Alka Jindal, Savita Gupta, Lakhwinder Kaur</td>
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<td>Perceptual Hashing in the 3D-DWT Domain</td>
<td>Navajit Saikia</td>
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<tr>
<td>Log Analytics on Cloud using Pattern Recognition: A Practical Perspective to Cloud Based Approach</td>
<td>Avinash Bhole, B. Adinarayana, Sanath Shenoy</td>
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<td>Human Gait Analysis using Wavelet De-noising and Total Variation Filtering</td>
<td>Amit Singh, Abhishek Thakur</td>
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<td>Innovative Algorithms for Parts of Speech Tagging in Hindi-English Machine Translation Language</td>
<td>Shachi Mall, Umesh Chandra Jaiswal</td>
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<td>Image retrieval using Color and Texture Binary Patterns</td>
<td>A. Bhagyalakshmi, V. Vijaya Chamundeeswari</td>
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<td>A Comparative Analysis of Single Pattern Matching Algorithms in Text Mining</td>
<td>Ananthi Sheshasayee, G. Thailambal</td>
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<td>Facial Components Extraction and Expression Recognition in Static images</td>
<td>Mameeta Pukhrambam, Arundhati Das, Ashim Saha</td>
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#### 15:30 – 16:00 Tea/Coffee Break

### Session 4.1: Green Computing (2) [Parallel]

**Date/Time:** Friday, 9 October 2015 / 16:00 – 18:00

**Venue:** 004, Ground Floor, Block E

**Chair(s):** Prof. Subarna Shakya, Tribhuvan University, Nepal

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<td>Automatic Hair Color De-identification</td>
<td>Jiri Prinosil, Ales Krupka, Kamil Riha, Malay Kishore Dutta, Anushikha Singh</td>
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<tr>
<td>Experimental Analysis of Energy Management Techniques for Mobile Devices Using Cloud Computing</td>
<td>Oshin Sharma, Hemraj Saini</td>
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<tr>
<td>Lightweight Protocols for LTE M2M Networks</td>
<td>Mukesh Taneja</td>
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</table>

**Presenting Author:**
- Alka Jindal — PEC, University of Technology, India
- Navajit Saikia — Assam Engineering College, India
- Hemadri Pavan Kumar N — Siemens Technology and Services Limited, India
- Amit Singh — Delhi Technological University, India
- Shachi Mall — Madan Mohan Malaviya University of Technology, India
- A. Bhagyalakshmi — Velammal Engineering College, India
- Ananthi Sheshasayee — SCSVMV University, India
- Mameeta Pukhrambam — NIT Agartala, India
- Jiri Prinosil — Amity University, India
- Anushikha Singh — Amity University, India
- Oshin Sharma — Jaypee University of Information Technology Waknaghat, India
- Mukesh Taneja — Cisco Systems, India
Few Location based Routing Protocols in Wireless Sensor Network
Shruti, Uma Kumari
Presenting Author: Shruti — Mody university of Science and technology, India

Hybrid PI-Fuzzy Logic Controller Based DC-DC Converter
Mahendra kumar, deepak renwal
Presenting Author: Mahendra kumar — Career Point University, India

Green Computing & Strategies
Shivam Singh
Presenting Author: Shivam Singh — Galgotias College of Engineering & Technology, India

Epsilon-SVR and Decision Tree for Stock Market Forecasting
S.S. Panigrahi, J. K. Mantri
Presenting Author: Sasanka Panigrahi — North Orissa University, India

Green Computing
Shweta Vikram
Presenting Author: Shweta Vikram — Babasaheb Bhimrao Ambedkar University, India

Load Balancing in Cloud Computing Using Dynamic Load Management Algorithm
Reena Panwar, Bhawna Mallick
Presenting Author: Reena Panwar — Galgotias College of Engineering and Technology, India

Development of IoT based Vehicular Pollution Monitoring System
Chandra Mohan Reddy Sivapagari, Ramagiri Rushikesh
Presenting Author: Chandra Mohan Reddy Sivapagari — JNTUA College of Engineering, India

Session 4.2 – Internet of Things (2) [Parallel]
Date/Time: Friday, 9 October 2015 / 16:00 – 18:00
Venue: 005, Ground Floor, Block E
Chair(s): Prof. K. Chandrasekaran, National Institute of Technology, India

Energy Efficient Network Architecture for IoT Applications
P. Sarwesh, N. Shekar V. Shet, K. Chandrasekaran
Presenting Author: K. Chandrasekaran — National Institute of Technology, India

Integration in The Physical World in IOT using Android Mobile Application
Chaitanya Raveendra, M. Thiagarajan
Presenting Author: M. Thiagarajan — Nehru Group of Institution, India

Healthcare based on IoT using Raspberry Pi
M. Surya Deekshith Gupta, Vamsikrishna Patchava, Virginia Menezes
Presenting Author: M. Surya Deekshith Gupta — ISM-Dhanbad, India

Design of a Telemonitoring System for Detecting Falls of the Elderly
Nitha V Panicker, A. Sukesh Kumar
Presenting Author: Nitha V. Panicker — College of Engineering, India

Evolution of IoT in Smart Vehicles : An Overview
M. Keertikumar, M. Shubham, Rajeshwari Banakar
Presenting Author: Keertikumar M — KLE Technological University, India

Internet of Things and Its Challenges
Mayank Dixit, Jitendra Kumar, Rajesh Kumar
Presenting Author: Mayank Dixit — Galgotias University, India

Improvement Power System Stability Using Unified Power Flow Controller Based On Hybrid Fuzzy Logic-PID Tuning In SMIB System
Mahendra kumar, Ravinder Kumar
Presenting Author: Mahendra kumar — Career Point University, India
525 Integration in the Physical World in IoT using Android Mobile Phones
Muthunatesan Thiyagarajan, Chaitanya Raveendra
Presenting Author: Muthunatesan Thiyagarajan — Anna University, India

715 Information System Audit: An Overview Study in E-Government of Nepal
Abhijit Gupta, Subarna Shakya
Presenting Author: Abhijit Gupta — Singhania University, India

589 Real Time Internet Application with Distributed Flow Environment for Medical IoT
Boopala krishnan, Sivu Sankara Sai, Satya Brata Mohanthy
Presenting Author: Boopala krishnan — Sri Sathyasai Institute of Higher Learning, India

241 Statistical KPIs in HMI Panels
Karthik Ragunathan, Sampurna Racindranathan, S. S. M. Naveen
Presenting Author: S. S. M. Naveen — Siemens Technology and Services Pvt. Ltd., India

538 Digital Technology Actualizing Dialogue of International Relations in New Form
Rajendra Man Banepali, Subarna Shakya, Gajendra Sharma
Presenting Author: Rajendra Man Banepali — Singhania University, India

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<td>Chair(s)</td>
<td>Prof. Khyati Vachhani, Nirma University, India</td>
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532 Nearest Cluster-based Compund Network Protocol Identification
Amol P. Bhagat, Kiran A. Dongre
Presenting Author: Kiran A. Dongre — Prof Ram Meghe College of Engineering and Management, India

748 Visual Cryptography for Image Privacy Protection using with Diverse Image Media
Jyoti Rao, Vikram Patil
Presenting Author: Jyoti Rao — JITU, India

591 Trust Based Energy Efficient Coverage Preserving Protocol for Wireless Sensor Networks
Pooja Chaturvedi, A. K. Daniel
Presenting Author: Pooja Chaturvedi — Madan Mohan Malviya University of Technology, India

681 Performance Evaluation of Different OFDM Transmission Schemes
Sayantani Ghosh, Sutanu Ghosh
Presenting Author: Sayantani Ghosh — Jadavpur University, India

719 Prevalent Criteria’s in Regression Test Case Selection Techniques: An Exploratory Study
Priyanka Dhareula, Anita Ganpati
Presenting Author: Priyanka Dhareula — Himachal Pradesh University, India

554 Prototype for Intelligent Ticketing System Using NFC
Anita Chaudhari, Brinzel Rodrigues, Pratap Sakhare, Caston Fernandes
Presenting Author: Anita Chaudhari — St. John College of Engineering and Technology, India

809 Various Schemes to Detect Selfishness in Wireless Ad-hoc Networks: A Survey
Priya P. Patel, Rutvij H. Jhaveri
Presenting Author: Priya P. Patel — SVMIT, India

744 Multiresolution Analysis: An Unified Approach using Discrete Wavelet Transform on GNU Radio
Khyati Vachhani
Presenting Author: Khyati Vachhani — Nirma University, India

804 Simulation Study of Application Layer DDoS Attacks
Barjinder Singh, Krishan Kumar, Abhinav Bhandari
Presenting Author: Barjinder Singh — SBSCET, India
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<td>Chair(s)</td>
<td>Dr. S.K. Niranjan, SJCE, Mysore, India</td>
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338 Ranking Based Prediction of Keyword Over Big Databases  
Abhijeet Kothawade, Jagdish Bagul, Milan Harak, Bharati Patil  
Presenting Author: Abhijeet Kothawade — Sandip Institute of Technology and Research Center, India

782 Performance Evaluation of Fair and Capacity Scheduling in Hadoop YARN  
Garima Sharma, Anita Ganpati  
Presenting Author: Garima Sharma — Himachal Pradesh University, India

754 Restaurant Recommender System Based on Psychographic and Demographic Factors in Mobile Environment  
Rahul Katarya, OM Prakash Verma  
Presenting Author: Rahul Katarya — Delhi Technological University, India

489 New Paradigm to Keyword Search: A Survey  
Shilpa S. Laddha, Anurag R. Laddha, Pradip M. Jawandhiya  
Presenting Author: Shilpa S. Laddha — Government College of Engineering, Aurangabad, India

517 Real-time Prediction of Information Search Channel Using Data Mining Techniques  
Gaurav Khatwani, Praveen Ranjan Srivastava  
Presenting Author: Gaurav Khatwani — Indian Institute of Management, India

511 Comparative Study between Different Classifiers based Speaker Recognition System using MFCC for Noisy Environment  
Mahendra kumar, Abhilasha sukhwal  
Presenting Author: Mahendra kumar — Rajasthan College of Engg. for Women, India

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<th>Session</th>
<th>4.5 – Image Processing &amp; Pattern Recognition (3) [Parallel]</th>
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<td>Chair(s)</td>
<td>Prof. Unni Krishnan A, GIMT, Greater Noida, India</td>
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363 Human Face Recognition using Facial Feature Detection Techniques  
Ravi Subban, Savitha Soundararajan  
Presenting Author: Ravi Subban — School of Engineering and Technology, India

265 Enhancement of Classification Accuracy of our Adaptive Classifier using Image Processing Techniques in the Field of Medical Data Mining  
Sneha Chandra, Maneet Kaur  
Presenting Author: Sneha Chandra — Lovely Professional University, India

511 Musical Instrument Identification Using SVM & MLP with Formal Concept Analysis.  
Swati Dnyaneshwar Patil  
Presenting Author: Swati Dnyaneshwar Patil —
397 Comparative Study of Artificial Neural Network Based Classification of IRS LISS-III Satellite Images  
*Anand Upadhyay, S. K. Singh, Pooja Singh, Priya Singh*  
Presenting Author: Anand Upadhyay — Thakur College of Science and Commerce, India

675 Face Recognition: A Template Based Approach  
*T. Archana, T. Venugopal*  
Presenting Author: T. Archana — Kakatiya University, India

358 Fruit Disease Detection Using Color, Texture Analysis and ANN  
*Ashwini Awate, Damini Deshmankar, Gayatri Amrutkar, Utkarsha Bagul, Samadhan Sonavane*  
Presenting Author: Damini Deshmankar — Sandip Institute of Technology and Research Center, India

529 Comparative Study of Different Classifiers based Speaker Recognition System using Modified MFCC for Noisy Environment  
*Mahendra kumar, Abhilasha sukhwal*  
Presenting Author: Mahendra kumar — Rajasthan College of Engg. for Women, India

769 Real-Time Robust Face Detection and Tracking using extended Haar functions and improved Boosting algorithm  
*Arundhati Das, Mameeta Pukhrambam, Ashim Saha*  
Presenting Author: Arundhati Das — National Institute of Technology, India

500 Semi Visible Watermarking Scheme Based on DWT and PCA  
*Anand Kumar, Mukesh Gupta*  
Presenting Author: Anand Kumar — Government Engineering College, India

354 Facial Expression Recognition using VFC and Snakes  
*Neha Kulkarni, Snehal Kulkarni, Miteshwari Pardeshi, Prajakta Sanap, N. D. Ghuse*  
Presenting Author: Neha Kulkarni — Savitribai Phule Pune University, India

121 Comparison of Spatial Color Histograms Using Quadratic Distance Measure  
*Jyoti Narwade, Binod Kumar*  
Presenting Author: Jyoti Narwade — PAHER University, India

19:00 – 21:30 Conference Banquet
## Technical Programme — Day 3: Saturday, 10 October 2015

### Keynote 8

**Date / Time**: 09:00 – 09:45 hrs  
**Title/By**: Towards Multi-modal Cognitive Autonomous Systems  
by Prof. Dr. Amir Hussain, *University of Stirling, Scotland, UK*  
**Venue**: Auditorium, Block D  
**Chair**: Dr. S.K. Niranjan, SJCE, Mysore, India

### Keynote 9

**Date / Time**: 09:45 – 10:30 hrs  
**Title/By**: MCTS application to Dynamic Vehicle Routing  
Dr. Jacek Mandziuk, *Warsaw University of Technology, Poland*  
**Venue**: Auditorium, Block D  
**Chair**: Dr. S.K. Niranjan, SJCE, Mysore, India

### Tea/Coffee Break

10:30 – 11:00

### Session 5.1 – Networking and Communication Protocols (3) [Parallel]

**Date/Time**: Saturday, 10 October 2015 / 11:00 – 13:00  
**Venue**: 004, Ground Floor, Block E  
**Chair(s)**: Mr. Suyambulingam Rathinasamy Muthupandi, *Samsung R & D Institute, India*

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<th>Paper Number</th>
<th>Title</th>
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| 724          | Placement of Relay Nodes in Wireless Sensor Networks  
*Viresh Ranga, Ramya Sharma*  
Presenting Author: Ramya Sharma — *National Institute of Technology, India* |
| 655          | Security Protocols for Wireless Sensor Networks  
*Monika Bhalla, Nitin Pandey, Brijesh Kumar*  
Presenting Author: Monika Bhalla — *Amity University, India* |
| 480          | Performance Analysis of AODV nthBR Protocol for Multimedia Transmission under Different Traffic Conditions for Sparse and Densely Populated MANETs  
*Meena Rao, Neeta Singh*  
Presenting Author: Meena Rao — *Maharaja Surajmal Institute of Technology, India* |
| 269          | S-AODV: An Adaptive Method for Improving AODV Protocol for WSN  
*M. Shoba, Suresha*  
Presenting Author: M. Shoba — *Sri Venkateshwara College of Engineering, India* |
| 622          | Wireless Network Security: Tough Times  
*Utkarsh Wadhwa*  
Presenting Author: Utkarsh Wadhwa — *Galgotias College of Engineering and Technology, India* |
| 513          | Secret Data Transmission using Vital Image Steganography over Transposition Cipher  
*Mamta Jain, Saroj Kumar Lenka*  
Presenting Author: Mamta Jain — *Mody University of Science and Technology, India* |
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<tr>
<td>Chair(s)</td>
<td>Er. Nikhil L. Kulkarni, Sandip Institute of Technology &amp; Research Centre, Nashik, India</td>
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1004 SchedCD: A Scheduling Algorithm for Cloud Computing in Data Centers

Rehan Ahmad, Ash Mohammad Abbas

Presenting Author: Ash Mohammad Abbas — Aligarh Muslim University, India

343 Discovering Execution of Real Time Tasks in Cloud Computing

Pankajdeep Kaur, Kanu Priya

Presenting Author: Kanu Priya — Guru Nanak Dev University, India

263 An Optimal Service Selection Algorithm based on QoS of Web Services

Parul Khullar, Deepali Panwar, Ashish Sharma

Presenting Author: Parul Khullar — Gla University, Mathura

590 Dynamic Key based Authentication Scheme for Vehicular Cloud Computing

Manish Kumar Sharma, Rasmeet S. Bali, Arvinder Kaur

Presenting Author: Manish Sharma — Chandigarh University, India

649 Energy Efficient Hybrid Policy in Green Cloud Computing

Yashi Goyal, Meenakshi S. Aryan, Sunil Nagpal

Presenting Author: Yashi Goyal — Punjab Technical University, India

349 Data Sharing Security And Privacy Preservation in Cloud Computing

Kadam Prasad, Jadhav Poonam, Khupase Gauri, N. C. Thoutam

Presenting Author: Kadam Prasad — Sandip Institute of Technology and Research Centre, India

286 Analysis of Open Source Cloud Infrastructures over Cost Incurred by Closed Source Cloud Infrastructures

J. Sharon Moses, L. D. Dhinesh Babu

Presenting Author: J. sharon Moses — VIT University, India

759 Implementing Chinese Wall Security Model for Cloud-based Services

Srijita Basu, Anirban Sengupta, Chandan Mazumdar

Presenting Author: Srijita Basu — Centre for Distributed Computing, Jadavpur University, India

344 Fault Tolerance Techniques and Architectures in Cloud Computing-A Comparative Analysis

Pankajdeep Kaur, Kanu Priya

Presenting Author: Kanu Priya — Guru Nanak Dev University, India

445 Identity Management in Hybrid Cloud

Aarti Goel, Gaurav Gupta, Mayank Bhushan

Presenting Author: Aarti Goel — ABES Engineering College, India

234 Study of Data Security and Privacy Preserving Solutions in Cloud Computing

Siddharth Dutt Choubey, Mohit Kumar Namdeo

Presenting Author: Mohit Kumar Namdeo — Shri Ram Institute of Technology, India

617 Efficient and Secured Approach for Faster Data Availability and Restoration in Disaster Cloud Data Management

Aditi Tripathi, Mayank Deep Khare, Pradeep Kumar Singh

Presenting Author: Aditi Tripathi — Madan Mohan Malaviya University of Technology, India
**Session 5.3 – Communication Engineering and Technology (1) — Special Session**  
[Parallel]

**Date/Time**  
Saturday, 10 October 2015 / 11:00 – 13:00

**Venue**  
006, Ground Floor, Block E

**Chair(s)**  
Prof. Durga Prasad Mohapatra, *National Institute of Technology, Rourkela, India*

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546  
Novel Design of Duplexer for S band Applications  
*Monika Tanwani, Ravendra Singh Chauhan, Kiran P. Singh*  
Presenting Author: Monika Tanwani — *Government Women Engineering College, Ajmer(Raj.), India*

662  
Dual Band Slotted Antenna with DGS  
*Monika Tanwani, Ravendra Singh Chauhan, Kiran P. Singh*  
Presenting Author: Monika Tanwani — *Government Women Engineering College, Ajmer(Raj.), India*

551  
Novel Design of Patch Antenna for C Band Applications  
*Shivani Soni, Kundan Singh Rathore, Kiran P. Singh*  
Presenting Author: Shivani Soni — *Government Women Engineering College, Ajmer(Raj.), India*

845  
Design of a Slotted Reconfigurable Patch Antenna for Present-G Wireless Communication  
*Nidhi Pandit, Purnima Sharma, S. K. Jha, P. P. Bhattacharya*  
Presenting Author: Nidhi Pandit — *Mody University of Science and Technology, India*

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**Session 5.4 – Wireless Communications Engineering and Technology — Special Session**  
[Parallel]

**Date/Time**  
Saturday, 10 October 2015 / 11:00 – 13:00

**Venue**  
009, Ground Floor, Block E

**Chair(s)**  
Er. Anand Nayyar, *KCL Institute of Management & Technology, Jalandhar, India*

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595  
Performance Improvement of Max-Log-MAP Turbo Decoding Algorithm using Optimized Scaling Factor for Image Transmission and Retrieval  
*M. Balasingh Moses, N. S. Pradeep,*  
Presenting Author: M. Balasingh Moses — *Anna University, India*

74  
Implementation Cost & Performance Analysis of Pulse Shaping Filter  
*Priyanka Agrawal, Rajesh Mehta, Monika Singh*  
Presenting Author: Priyanka Agrawal — *NITTTR, India*
Day 3: Saturday, 10 October 2015

834  WSN in Spice Cultivation
Ravi Kishore Kodali, Anupama Muraleedhar
Presenting Author: Anupama Muraleedhar — National Institute of Technology, India

114  Evaluate the Performance of Multiuser MIMO Detection Techniques
Soma Umanaheshwar, Tipparti Anil Kumar, K Srinivusa Rao
Presenting Author: Soma Umanaheshwar — JNTUH College of Engineering, Hyderabad, India

497  Performance Evaluation of Cooperative Relay Assisted Transmission Models in LTE System
Patteti Krishna, Kalitkar Kishan Rao, Tipparti Anil Kumar
Presenting Author: Patteti Krishna — SVS Group of Institutions, India

570  A Comparative Study of Reducing Mutual Coupling Between Two Novel UWB Antennas
Indranil Acharya, Saminur Rahman
Presenting Author: Saminur Rahman — Vellore Institute of Technology, India

Session 5.5 – Signal Processing & Sensor Web [Parallel]
Date/Time: Saturday, 10 October 2015 / 11:00 – 13:00
Venue: 010, Ground Floor, Block E
Chair(s): Prof. Dr. S.K. Niranjan, SJCE, Mysore, India

710  Epileptic Seizure Prediction and Identification of Epileptogenic Region using EEG Signal
Aarti Sharma, J. K. Rai, R. P. Tewari
Presenting Author: Aarti Sharma — Inderprastha Engg. College, India

650  Swarm Intelligence Based Computing Techniques in Speech Enhancement
Khumukcham Usharani Devi, Romesh Laishram, Dipjyoti Sarma
Presenting Author: Khumukcham Usharani Devi — Assam Don Bosco University, India

515  Leveraging the SIP Load Balancer to Detect and Mitigate DDoS Attacks
Abdullah Akbar, S. Mahaboob Basha, Syed Abdul Sattar
Presenting Author: Abdullah Akbar — JNTU, India

271  Analysing EEG Signals for Detection of Mind Awake Stage and Sleep Deprivation Stage
Mukesh Choubisa, Prakriti Trivedi
Presenting Author: Mukesh Choubisa — Govt. Engineering College, India

13:00 – 14:00 Lunch

Session 6.1 – Green Computing (3) [Parallel]
Date/Time: Saturday, 10 October 2015 / 14:00 – 15:30
Venue: 004, Ground Floor, Block E
Chair(s): Prof. Durga Prasad Mohapatra, National Institute of Technology, Rourkela, India

750  Multilevel Inverter based Single Stage Grid Connected Solar PV
A. Sarkar, S. Reddy, B. Das, P. R. Kasari, A. Saha, A. Chakrabarti
Presenting Author: A. Sarkar — NIT Agartala, India

257  Nanotechnology for Solar and Wind Energy Applications Recent Trends and Future Development
Sibu Sam John, Pravesh Malviya, Nitish Sharma, Vijay K. Manjhi, K. Sudhakar
Presenting Author: Vijay K. Manjhi — Maulana Azad National Institute of Technology, India

492  Modified Danger Theory Based Optimized Artificial Immune Network on Resiliency in Cyber-Physical System
M. R. Lokesh, Y. S. Kumaraswamy
Presenting Author: M. R. Lokesh — Sathyabama University, India
391 Smart Cities and Smart Homes: From Realization to Reality  
Siddharth Mehrotra, Rashi Dhande  
Presenting Author: Rashi Dhande — PRMTR-Amravati, India

738 Robotics: The Roadmap to a Digital life  
Mohd.Rayyan, Arunima Jaiswal  
Presenting Author: Mohd Rayyan — Amity University, India

519 Task Scheduling in Grid Computing using Genetic Algorithm  
Ujjwal Prajapati, Subarna Shakya  
Presenting Author: Ujjwal Prajapati — Tribhuvan University, Nepal

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**Session 6.2 – Machine Learning (2)**  
**Date/Time:** Saturday, 10 October 2015 / 14:00 – 15:30  
**Venue:** 005, Ground Floor, Block E  
**Chair(s):** Mr. Nitin Agrawal, Maruti Suzuki Ltd., Gurgaon, India

- Low Cost Self Powered Sand Rover System for Desert Region Surveillance  
  K. Yokesh, S. Karthik, Y. M. Jagadeesh, R. K. Sathiendran  
  Presenting Author: K. Yokesh — Panimalar Engineering College, India

- Navigation Aiding Stick for the Visually Impaired  
  Nishant Banat James, Ashish Harsola  
  Presenting Author: Nishant Banat James — F.C.R.I.T Vashi, India

- Design Development and Implementation of Wired Nurse Calling System  
  Chaman Sharma, Deepak Kumar Gautam  
  Presenting Author: Chaman Sharma — Research Scholar, India

- The Application of Cosine Transform and Principal Components for Foreground Detection in Video  
  V. N. Manjunath Aradhya, R. Amith, S. K. Niranjan  
  Presenting Author: V. N. Manjunath Aradhya — S.J. College of Engineering, India

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**Session 6.3 – Eco-friendly Computing & Communication Resources (2)**  
**Date/Time:** Saturday, 10 October 2015 / 14:00 – 15:30  
**Venue:** 006, Ground Floor, Block E  
**Chair(s):** Dr. Om Prakash Sangwan, Guru Jambheshwar University of Science & Technology, Hisar

- Maximization of Energy Efficiency in Wireless Multi-hop Networks  
  Hia Ghosh, Keshaw Dewangan  
  Presenting Author: Hia Ghosh — Batanagar Institute of Engineering, India

- Surveillance and Monitoring System Using Raspberry Pi and Simple CV  
  Virginia Menezes, Vamsikrishna Patchava, Surya Deekshith Gupta  
  Presenting Author: Virginia Menezes — St.Francis Institute of Technology, India

- Implementation of Reversible Data Hiding In Encrypted Image Using A-S Algorithm  
  Aswin Achuthshankar, Aswathy Achuthshankar, K. P. Arjun, N. M. Sreenarayanan  
  Presenting Author: N. M. Sreenarayanan — University of Calicut, India

- Single phase AC Drive for Isolated Solar Photovoltaic Water Pumping System  
  Jyoti H.Ugale, M. S. Panse  
  Presenting Author: Jyoti H.Ugale — V.J.T.I, India
Ranking Software Quality Factors using Intuitionistic Preference Relations and Group Decision Making
Ritu Shrivastava
Presenting Author: Ritu Shrivastava — Sagar Institute of Research Technology and Science, India

Spectrum Hand off in Cognitive Radio Network using Dynamic Threshold
Shashi Bhushan, Rasmeet S. Bali, Akwinder kaur
Presenting Author: Shashi Bhushan — Chandigarh University, India

### Session 6.4 – Internet of Things (3) [Parallel]

**Date/Time:** Saturday, 10 October 2015 / 14:00 – 15:30

**Venue:** 009, Ground Floor, Block E

**Chair(s):** Mr. Sanjiv Bansal, Group Manager, ST Micro Electronics Ltd., India

- **216** Mobile Attendance Using Near Field Communication and One-Time Password
  John Jacob, Kavya Jha, Paarth Kotak, Shubha Puthran
  Presenting Author: Kavya Jha — MPSTME, NMIMS, India

- **677** Low Cost Realization of Square and Square Multiplication Operations Using Toffoli Gates
  Jitesh Kumar Meena, Chotu Lal, Hitesh Gupta, Sushil Chandra Jain
  Presenting Author: Jitesh Kumar Meena — UCE, Rajasthan Technical University, India

- **790** Internet of Things-Smart Environment
  Siffi Singh, Kirti Mittal
  Presenting Author: Siffi Singh — Galgotias College of engineering & Technology, India

- **340** A Review on Recent Phishing Attacks in Internet
  Lakhita, Surendra Yadav, Brahmdutt Bohra, Pooja
  Presenting Author: Lakhita — Maharishi Arvind College of Engineering & Research Center, India

- **291** Location Based Advertisement Publishing by Using Wi-Fi and QR Codes
  Pankaj Virulkar, Avinash N. Bhute
  Presenting Author: Pankaj Devidas Virulkar — Sinhgad College of Engineering, India

- **717** Design and Implementation of an Ad Hoc Network among Android Smart Devices
  Tanweer Alam, Mohammed Aflohari
  Presenting Author: Tanweer Alam — Islamic University, Madinah, Saudia Arabia

- **371** Improving Performance of Internet of Things by using Local IOT Controller unit
  Sushma Satpute, Bharat Singh Deora
  Presenting Author: Sushma Satpute — Cummins College of engg. For Women, India

### Session 6.5 – Data Mining (2) [Parallel]

**Date/Time:** Saturday, 10 October 2015 / 14:00 – 15:30

**Venue:** 010, Ground Floor, Block E

**Chair(s):** Prof Bhawna Mallick, Galgotias College of Engineering & Technology, India

- **624** A Proposed Framework to Optimize the Query by Filtering Noise using Semantic Information Processing
  Neha Gulati, Atul Garg
  Presenting Author: Neha Gulati — M.M. University, India

- **256** Template Creation to Merge Disparate Software Solutions by Adapting Software Engineering Principles
  Nazneen Ansari, Gopakumar Thanpi
  Presenting Author: Nazneen Ansari — Thadomal Shahani Engineering College (TSEC), India
213 Educational Data Mining Techniques and their Applications
Kavya Jha, John Jacob, Paarth Kotak, Shubha Puthran
Presenting Author: Kavya Jha — MPSTME, NMIMS, India

721 Implementation of Dual Security through DSA and Audio Steganography
Natasha Taneja, Prinima Gupta
Presenting Author: Natasha Taneja — Manav Rachna University, India

773 Search Model for Searching the Evidence in Digital Forensic Analysis
Sweedle Mascarnes, Prajyoti lopes, Pratap Sakhare
Presenting Author: Sweedle Mascarnes — St. Francis Institute of Technology, India

764 Offline Location Search using Reverse k-mean Clustering & GSM Communication
Asmita Singh, Devendra Somawanshi
Presenting Author: Asmita Singh — School of Engineering & Technology, Poornima University, India

357 Frequent Itemset Mining For Big Data
Priyanka Kulkarni, Kiran Chavan, Pooja Ghodekar, S. N. Patil
Presenting Author: Priyanka Kulkarni — Sandip Foundation (SITRC), India

301 Enabling Multi-level Trust in Privacy Preserving Data Mining
Shehajad Khan, Tejas Gorhe, Ramesh Vig, Bharati A. Patil
Presenting Author: Shehajad Khan — Savitribai Phule Pune University, India

494 A Comparative Study of Server Log Formats for Efficient Web Mining
Pratibha Sharma, Surendra Yadav, Brahmdutt Bohra
Presenting Author: Pratibha Sharma — Rajasthan Technical University, India

102 Survey on Selenium Tool in Software Testing
Insha Altaf, Jawad Ahmad Dar, Firdous ul Rashid, Mohd. Rafiq
Presenting Author: Insha Altaf — Amity University, India

15:30 – 16:00 Tea/Coffee Break

Session 7.1 – Power-aware Algorithms and Protocols (2) [Parallel]
Date/Time Saturday, 10 October 2015 / 16:00 – 18:00
Venue 004, Ground Floor, Block E
Chair(s) Dr. S.K. Niranjan, SJCE, Mysore, India

659 Relay Node Placement Techniques in Wireless Sensor Networks
Abhishek Verma, Viren Ranga, Suneer Angra
Presenting Author: Abhishek Verma — National Institute of Technology, India

822 Five Staged Pipelined Microprocessor with Self Clocking Mechanism
Anish Gupta, Vinayak Kini, Prathik Shetty, Chirag Bafna
Presenting Author: Anish Gupta — Vivekanand Education Society’s Institute of Technology, India

133 Improved Authentication Scheme Using Password Enabled Persuasive Cued Click Points
Neha Singh, Nikhil Bomanwar
Presenting Author: Neha Singh — Veermata Jijabai Technological Institute, India

34 Fuel Level Management in Automotive System: Solving Fuel Sloshing Issues
Deepak Kumar Gautam, Gaur Modwel, Amit Kumar, Ajay Tiwari
Presenting Author: Deepak Kumar Gautam — Research Scholar, India

526 Using Gem5 Simulator and DineroIV Cache Simulator to analyse TLB and Cache Statistics with Multi Threaded Parsec Benchmarks
Avani Sharma, Anay Jain
Presenting Author: Avani Sharma — Maulana Azad National Institute of Technology, India
518 SPIN based Hybrid Multi Hop Clustering Scheme  
Divyansh Chauhan, Rajat Asthana, Vilsan Gupta, Rakesh Kumar  
Presenting Author: Rakesh Kumar — MMM University of Technology, India

711 Hardware Implementation and Reduction of Artifacts from ECG Signal  
Aman Gupta, U. M. Chaskar  
Presenting Author: Aman Gupta — College of Engineering Pune, India

282 Design and Simulation of Energy Efficiency in Node based on MQTT Protocol in Internet of Things  
Mohsen Hallaj Asghar, Nasibeh Mohammadzadeh  
Presenting Author: Mohsen Hallaj Asghar — University of Hyderabad

388 Modified Dual Three Pulse Modulation Technique for Single Phase Inverter Topology  
N. R. Sree Harsha  
Presenting Author: N. R. Sree Harsha — R. V. College of Engineering, India

733 A Survey of Various Energy Efficient Secure Routing Approaches for Wireless Ad-hoc Networks  
Sachi Shah, Rutvij Jhaveri  
Presenting Author: Sachi Shah — SVMIT, India

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### Session 7.2 – Cloud Computing (3)

**Date/Time**: Saturday, 10 October 2015 / 16:00 – 18:00  
**Venue**: 005, Ground Floor, Block E  
**Chair(s)**: Prof. Subarna Shakya  
*Tribhuvan University, Nepal*

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<td>Chunjie Zhou, Pengfei Dai, Zhenxing Zhang</td>
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<td>801</td>
<td>Securing Data Transmission Over Wireless LAN (802.11) by Redesigning RC4 Algorithm</td>
<td>Shenam Chugh, Kamal Dhanda</td>
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<td>802</td>
<td>A Novel and Efficient Approach to Encrypt Images Using Chaotic Logistic Map and Stream Cipher</td>
<td>Manju Rani, Sudesh Kumar</td>
<td>BRCMCET, Bhiwani, India</td>
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<td>Security Challenges in Cloud</td>
<td>Sonal Shukla, Surendra Yadav, Brahmdutt Bohra</td>
<td>Maharishi Arvind College of Engg. and Reaserch Center, India</td>
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<td>Anchal Pokharana, Rahul Hada</td>
<td>Poornima University, India</td>
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<td>Survey On Security Concerns In Cloud Computing</td>
<td>R. Patil Madhubala</td>
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<td>669</td>
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<td>Sadia Syed, M. Ussenaiah</td>
<td>Vikrama Simhapuri University, India</td>
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<td>Subhasish Mandal, Sourvik Bhattacharyya</td>
<td>University Institute of Technology, India</td>
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<td>559</td>
<td>Storage Cost efficient approach for Cloud storage and Intermediate Data Sets in Clouds</td>
<td>Mayank Deep khare, Aditi Tripathi, Pradeep kumar Singh</td>
<td>Madan Mohan Malviya university of Technology, India</td>
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788 Identity and Access Management – A comprehensive Study
Anuja Sharma, Meenu Dave, Sarita Sharma
Presenting Author: Anuja Sharma — WCTM, India

864 Cloud Computing Data Breaches – A Socio-technical Review of Literature
Katina Michael, David Koleoski
Presenting Author: Katina Michael — University of Wollongong, Australia

498 Data Outsourcing: A Threat to Confidentiality Integrity and Availability
Malay Kumar, Jasraj Meena, Manu Vardhan, Rahul Singh
Presenting Author: Rahul Singh - National Institute of Technology, Raipur Chhattisgarh

785 Risk Based Access Control In Cloud Computing
Lakshmi H
Presenting Author: Lakshmi H — Nitte Meenakshi Institute of Technology, pb no-6429, govindapura, gollahalli, yelahanka, Bangalore-64,

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**Session 7.3 – Big Data & Cloud Computing [Parallel]**

**Date/Time**
Saturday, 10 October 2015 / 16:00 – 18:00

**Venue**
006, Ground Floor, Block E

**Chair(s)**
Dr. Pinaki Chattopadhyay, Data Scientist, IBM, India

463 Analytical Literature Survey on Existing Load Balancing Schemes in Cloud Computing
Garima Rastogi, Rama Sushil
Presenting Author: Garima Rastogi — DIT University, India

808 A Survey of Implicit Trust on Social Networks
Anuradha Yadav, Shampa Chakraverty, Ritu Sibal
Presenting Author: Anuradha Yadav — Netaji Subhas Institute of Technology, India

472 Towards the Formalization of Road Traffic Management System for Safety Critical Properties by Z Notation
Monika Singh, A.K.Sharma, Ruchi Saxena
Presenting Author: Monika Singh — Mody University of Science & Technology, India

779 A Dynamic Approach for Fault Tolerance with Voltage Scaling
Arvind Kumar, Bashir Alam
Presenting Author: Arvind Kumar — FET, Jamia Millia Islamia, India

359 Role of Steganography in Big Data
Pooja, Surendra Yadav, Brahmdutt Bohra, Lakhita
Presenting Author: Pooja — Maharishi Arvind College of Engineering & Research Center, India

474 Comparative Approach For Different Backup And Monitoring Techniques
Rumaisa Akbar
Presenting Author: Rumaisa Akbar — Integral University, India

694 Static Code Analysis and Detection of Multiple Malicious Java Applets using SVM
Sapana Y. Salunkhe, Tareek M. Pattewar
Presenting Author: Sapana Y. Salunkhe — North Maharashtra University, SES’s R. C. Patel Institute of Technology, India

542 Spherule Diagrams: A Matrixbased Set Visualization Compared with Euler diagrams
Mithilesh Sathiyaranayanan, Donato Pirozzi
Presenting Author: Mithilesh Sathiyaranayanan — University of Brighton, UK

564 Multicore Efficient Scheduling for Operating System to Avoid Congestion In Client-Server Architecture
Anchal Thakur, Ravinder Thakur
Presenting Author: Anchal Thakur — L.R Institute of Engineering and Technology, India
Multi User Searchable Encryption Schemes using Trusted Proxy for Cloud based Relational Databases
Kurra Mallaiah, S. Ramachandram, Rishi Kumar Gandhi
Presenting Author: Kurra Mallaiah — Osmania University, India

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<td>Dr. Rajiv Kumar Shakya, Galgotias College of Engg &amp; Technology, India</td>
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Smart Health Monitoring System for Animals
Anushka Patil, Rohini Tambe, Chetana Pawar, Neha Patil
Presenting Author: Anushka Patil — Student

Reconfigurable Single and Dual Band Microstrip Patch Antenna for Satellite Communications
Rachana Yadav, Sandeep Kumar Yadav, Indra Bhooshan Sharma
Presenting Author: Indra Bhooshan Sharma — Govt. Engineering College Ajmer, Rajasthan, India

Implementation and Impact of Gray Hole Attack in VANET
Swati Verma, Bhauna Mallick
Presenting Author: Swati Verma — Galgotias College, India

DANE: An Inbuilt Security Extension
K. Chandrasekaran, C. Aishwarya, M. A. Raghuram, Sachin Hosmani, M. S. Sanmichan, R. Balaji, B. S. Bindhumadhava
Presenting Author: K. Chandrasekaran — National Institute of Technology Karnataka, India

Internet of Things (IoT): Security Challenges, Business Opportunities & Reference Architecture for E-commerce
Sachchidanand Singh, Nirmala Singh
Presenting Author: Sachchidanand Singh — IBM Software Labs, India

Life-Cycle Tracking System of Home Automation Devices (LED Bulbs)
Sujeet Pandey, Arnab Paul, Laishram Jenny Chau
Presenting Author: Laishram Jenny Chau — Assam University, India

Smart System: IoT for University
Kamlesh Sharma, T. Surryanthi
Presenting Author: Kamlesh Sharma — Lingaya's University, India

A Compact Dual Band Antenna for IOT Applications
Shuchismita Pani, Parameswar Banerjee, Asmita Rajawat
Presenting Author: Shuchismita Pani — Amity School of Engineering and Technology, India

Multimedia Enabled Virtual Classroom for Distance Education
Vivian Brian Lobo, Nazneen Ansari
Presenting Author: Vivian Brian Lobo — St. Francis Institute of Technology (SFIT), India

Negative Pressure Wound Therapy Impact On Fast Recovery In Major And Minor Surgery
Recovery Time
Ravinder Kaur, jaspreet kaur, manpreet kaur
Presenting Author: Ravinder Kaur — CGC landran, India

Low Cost Cataract Detection System using Smart Phone
Manpreet kaur, Ravinder kaur, jaspreet kaur
Presenting Author: Manpreet Kaur — CGC landran Mohali, India
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Presenting Author: Mohit Agarwal — Abes College, India

194  Next State Prediction Algorithm for the Avionic systems using the Hidden Markov Model  
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Presenting Author: M. R. Lokesh — Sathyabama University, India

555  Prototype for Signature Verification System using Euclidean Distance  
Brinzel Rodrigues, Anita Chaudhari, Pratap Sakhare, Dimpy Modi  
Presenting Author: Brinzel Rodrigues — St. John College of Engineering and Technology, India

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**End of the Conference**

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293  Haptics Human Interaction and Surface Simulation  
Raghavendra Mohan Shet  
Presenting Author: Raghavendra Mohan Shet - K L E Technological University, India

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381  A Survey on Fingerprint Biometric Recognition System  
Varsha Rathod  
Presenting Author: Varsha J Rathod - BVBCET, India