2018 10th International Conference on Communication Systems & Networks (COMSNETS 2018)

Bengaluru, India
3-7 January 2018

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Program

Thursday, January 4, 11:30 - 13:00

INV: Network Protocols and Applications

High-Performance Packet Processing and Measurements ¨˙%
  Sebastian Gallenmüller and Dominik Scholz (Technical University of Munich, Germany); Florian Wohlfart and Quirin Scheitle (Technische Universität München, Germany); Paul Emmerich (Technical University of Munich, Germany); Georg Carle (Technische Universität München, Germany)

Towards Resilient In-band Control Path Routing with Malicious Switch Detection in SDN ¨˙-
  Purnima Murali Mohan, Tram Truong-Huu and Mohan Gurusamy (National University of Singapore, Singapore)

An RBF-PSO Based Approach for Early Detection of DDoS Attacks in SDN ¨˙%+
  Neelam Dayal and Shashank Srivastava (Motilal Nehru National Institute of Technology Allahabad, India)

HetNets: Heterogeneous networks

Room: Grand Ball Room

INCARNATE: An Interference Aware Spatial Scheme for Tightly Coupled LTE-Wi-Fi Networks ¨˙&)
  Sumanta Patro (Indian Institute of Technology Hyderabad, India); Thomas Valerrian Pasca S and Bheemarjuna Reddy Tamma (IIT Hyderabad, India); Antony Franklin A (Indian Institute of Technology Hyderabad, India)

LTE-U and Wi-Fi Hidden Terminal Problem: How Serious is It for Deployment Consideration? ¨˙' '
  Anand Baswade (IIT Hyderabad, India); Touheed Atif (Indian Institute of Technology Hyderabad, India); Bheemarjuna Reddy Tamma (IIT Hyderabad, India); Antony Franklin A (Indian Institute of Technology Hyderabad, India)

Opportunistic MAC Protocol for Co-existence of M2M and Wi-Fi Network ¨˙(%
  Biplab Sikdar and Ajinkya Rajandekar (National University of Singapore, Singapore)

Thursday, January 4, 14:00 - 15:30

MSens: Mobile Sensing

Puppeteer: De-centralized Platform for Connected-Yet-Autonomous Educational Toys ¨˙(-
  Padmanabha Venkatagiri Seshadri, Aditya Sinha, Rahul Krishna Yandrapally, Prasenjit Dey and Bikram Sengupta (IBM Research, India)

Detecting Activities at Metro Stations Using Smartphone Sensors ¨˙)+
  Aanchal Mongia (IIIT Delhi, India); Venkata M. V. Gunturi (IIT-Ropar, India); Vinayak Naik (IIIT Delhi, India)

FullStop: Tracking Unsafe Stopping Behaviour of Buses ¨˙*)
  Ravi Bhandari (IIT Bombay, India); Bhaskaran Raman (Indian Institute of Technology, Bombay, India); Venkata N. Padmanabhan (Microsoft Research, USA)

Thursday, January 4, 16:00 - 17:30

OSN: Online Social Networks

Room: Grand Ball Room

User Response Based Recommendations: A Local Angle Approach¨˙+'
Veeraruna Kavitha, Salman Anis Memon and Manjesh K Hanawal (IIT Bombay, India); Eitan Altman (INRIA, France); Dev Anand (, unknown)

Weighted Kshell Degree Neighborhood Method An Approach Independent of Completeness of Global Network Structure for Identifying the Influential Spreaders¨˙, %
Amrita Namtirtha (National Institute of Technology Durgapur, India); Animesh Dutta (NIT Durgapur, India); Biswanath Dutta (ISI Bangalore, India)

Enterprise Contextual Awareness from News and Social Media - a Framework¨˙, -
Lipika Dey and Ishan Verma (Innovation Labs, India)

Friday, January 5, 11:00 - 13:00

TE: Traffic analysis and engineering

Personal Insights on Three Research Directions in Networked Systems¨˙- +
Kirill Kogan (IMDEA Networks Institute, Spain); Sergey I Nikolenko (Steklov Mathematical Institute at St Petersburg, Russia); Vitalii Demianiuk (IMDEA Networks Institute, Spain); Pavel S Chuprikov (Steklov Mathematical Institute at St. Petersburg & IMDEA Networks Institute, Russia); Alex Davydow (Steklov Math. Institute, Russia)

Cooperative Game Theory Based Network Partitioning for Controller Placement in SDN¨˙%$)
Bala Prakasa Rao Killi and Akhil Reddy Ellore (Indian Institute of Technology Guwahati, India); S. V. Rao (Indian Institute of Technology, Guwahati, India)

Efficient Load Balancing for Multicast Traffic in Data Center Networks Using SDN¨˙%%'
Nithin V (IIT Jodhpur, India); Avan Rathod (Indian Institute of Technology Jodhpur, India); Venkataramana Badarla (Indian Institute of Technology Tirupati, India); Tim Humernbrum (University of Münster, Germany); Sergey Gorlatch (University of Munster, Germany)

Enhancing Traffic Model of Big Cities Network Skeleton & Reciprocity¨˙%&%
Manish Bhanu (INESC TEC Porto, India); Joydeep Chandra (Indian Institute of Technology Patna, India); Joao Moreira (INESC TEC Porto, Portugal)

Minerva: A Reinforcement Learning-Based Technique for Optimal Scheduling and Bottleneck Detection in Distributed Factory Operations¨˙%&-
Tara Elizabeth Thomas, Jinkyu Koo, Somali Chaterji and Saurabh Bagchi (Purdue University, USA)

PLC: Physical Layer Communication

Room: Grand Ball Room

Compressive Sensing Based Energy Efficient Wideband Cognitive Radio Network¨˙%' +
Siddharth Deshmukh (National Institute Of Technology, Rourkela, India); Snigdha Bhuyan (National Institute of Technology, Rourkela, India)

SNR Wall for Cooperative Spectrum Sensing Using Generalized Energy Detector¨˙%('
Kamal Captain (Dhirubhai Ambani Institute of Information and Communication Technology, India); Manjunath V. Joshi (DA-IICT, India)

Autocorrelation-Based Spectrum Sensing of FBMC Signal¨˙%)%
Upender Reddy Keesara (IIIT Hyderabad, India); Sachin Chaudhari (International Institute of Information Technology, India)

On the Potential of TV White Space Spectrum to Enable a Low Cost Middle Mile Network Infrastructure¨˙**%)-**
> Mohamed M. Kassem and Mahesh K Marina (The University of Edinburgh, United Kingdom (Great Britain)); Oliver Holland (King's College London, United Kingdom (Great Britain))

Analysis and Enhancement of RPL Under Packet Drop Attacks¨˙**%*+**
> Binbin Chen, Yuan Li and Daisuke Mashima (Advanced Digital Sciences Center, Singapore)

Friday, January 5, 14:00 - 15:30

5GN: 5G and wireless broadband networks

TrackMAC: An IEEE 802.11ad-Compatible Beam Tracking-Based MAC Protocol for 5G Millimeter-Wave Local Area Networks¨˙**%+)**
> Bharadwaj Satchidanandan, Simon Yau and P R Kumar (Texas A&M University, USA); Ahsan Aziz, Amal Ekbal and Nikhil Kundargi (National Instruments, USA)

Novel Rate Matching Scheme for Downlink Control Channel in 3GPP Massive Machine Type Communications¨˙**%'**
> Pavan Kumar Reddy Manne (Indian Institute of Technology Hyderabad, India); Venkata Siva Santosh Ganji (IIT Hyderabad, India); Abhinav Kumar (Indian Institute of Technology Hyderabad, India); Kiran Kuchi (IIT Hyderabad, India)

5G Network Slicing for Digital Inclusion¨˙**%%**
> Josef Noll (UNIK, Norway); Sudhir Dixit (Basic Internet Foundation, USA); Danica Radovanovic (Basic Internet Foundation, Serbia); Maghsoud Morshedi and Christine Holst (University of Oslo, Norway); Andrea Winkler (TUM, Germany)

WSN: Wireless and sensor networks

Room: Grand Ball Room

PKHSN: A Pairing Based Key Management Scheme for Heterogeneous Sensor Networks¨˙**%,**
> Madhurima Buragohain (Indian Institute of Technology, Guwahati, India); Nityananda Sarma (Tezpur University, India)

A Scalable Pulse Protocol for Structural Health Monitoring¨˙**&$***
> Saptarshi Das and Subir Biswas (Michigan State University, USA)

Power Control and Cross-Layer Design of RPL Objective Function for Low Power and Lossy Networks¨˙**&%(**
> Harshavardhana T Gowda (Indian Institute of Space Science and Technology, India); Vineeth Bala Sukumaran (Indian Institute of Space Science and Technology, Trivandrum, India); Anand S. v. r. and Malati Hegde (Indian Institute of Science, India)

Friday, January 5, 16:00 - 17:00

WVN: Wireless and vehicular networks

Room: Grand Ball Room

Interference Management and Backhaul Design in Wireless Networks via a DoF Analysis¨˙**&&$**
> Venugopal Veeravalli (University of Illinois at Urbana-Champaign, USA); Meghana Bande (University of Illinois, Urbana Champaign, USA)

A Novel Methodology for Implementing Massive MIMO in High Speed Train Network with UPWARC¨**&&,**
> Subharthi Banerjee, Michael Hempel and Hamid Sharif (University of Nebraska-Lincoln, USA)

Orchestration of Cooperative Cruise Control for Networked Self-adaptive Cars¨**&')**
> Arun Adiththan (City University of New York - CUNY Graduate Center, USA); Kaliappa Ravindran (City University of New York, USA)

Saturday, January 6, 11:00 - 13:00

NPA: Network Protocols and Applications

Smart Cities: Challenges and Opportunities¨**&('**
> Raghunath Nambiar (CISCO, USA); Rajesh Shroff (Cisco, India); Shane Handy (Cisco, USA)

NeMoI: Network Mobility in ICN¨**&) %**
> Sripriya Srikant Adhatarao (Uni Goettingen, Germany); Mayutan Arumaithurai (University of Goettingen, Germany); Dirk Kutscher (Huawei German Research Center, Germany); Xiaoming Fu (University of Goettingen, Germany)

Pricing in Two-Sided Markets in the Presence of Free Upgrades¨**&) -**
> Mansi Sood, Sharayu Moharir and Ankur A. Kulkarni (Indian Institute of Technology Bombay, India)

Implementation of Energy Efficient WBAN Using IEEE 802.15.6 Scheduled Access MAC for e-Healthcare¨**&* +**
> Tanumay Manna and Iti Saha Misra (Jadavpur University, India)

Management of Adaptation Capability of Networked Systems in Dynamic Environments¨**&+)**
> Kaliappa Ravindran (City University of New York, USA); Arun Adiththan (City University of New York - CUNY Graduate Center, USA); Michael Iannelli (City University of New York (CUNY - City Colllege), USA); Khurshid Fayzullaev (Vimeo Inc., USA)

5GN: 5G and wireless broadband networks

Room: Grand Ball Room

A Learning-based Dynamic Clustering for Coordinated Multi-Point (CoMP) Operation with Carrier Aggregation in LTE-Advanced¨**&, '**
> Raja Karmakar (Techno India College of Technology, India); Samiran Chattopadhyay (Jadavpur University, India); Sandip Chakraborty (Indian Institute of Technology Kharagpur, India)

Efficient Proactive Caching in Storage Constrained 5G Small Cells¨**&- %**
> Samir Kumar Mishra (Samsung Semiconductor India R&D, India); Puneet Pandey (Samsung Semiconductor India R and D, India); Prince Arya and Alok Jain (Samsung Semiconductor India R&D, India)

The Energy Saving Potential of Static and Adaptive Resource Provisioning in Dense Cellular Networks¨**&- +**
> Gianluca A. Rizzo (HES SO Valais, Switzerland); Marco G Ajmone Marsan (Politecnico di Torino & IMDEA Networks, Italy)

Saturday, January 6, 14:00 - 15:30

MSens: Mobile Sensing

WI-LO: Wireless Indoor LOcalization Through Multi-Source Radio Fingerprinting¨ˈ $)
Marco Di Felice (University of Bologna, Italy); Carlos Bocanegra and Kaushik Chowdhury (Northeastern University, USA)

Smart Monitoring via Participatory BLE Relaying¨ˈ %&
Meeralakshmi Radhakrishnan, Sougata Sen, Archan Misra, Youngki Lee and Rajesh K Balan (Singapore Management University, Singapore)

Use of Facial Landmarks for Adaptive Compression of Videos on Mobile Devices¨ˈ &$
Ruchika Banerjee, Garima Chhikara, Vinayak Naik and Subramanyam Av (IIIT Delhi, India); Kuntal Dey (IBM Research India, India)

IoT: Internet of Things

Room: Grand Ball Room

Secure Communication and Firewall Architecture for IoT Applications¨ˈ &,
Haresh Dagale (IISc, India); Navinkumar Maheshwari (Indian Institute of Science & Maxlinear Technologies Pvt Ltd., India)

*A Highly Resilient and Scalable Broker Architecture for IoT Applications¨ˈ ˈ **
Souranil Sen (StonyBrook University, USA); Aruna Balasubramanian (Stony Brook University, USA)

A System for Distributed Audio Classification Using Sparse Representation over Cloud for IOT¨ˈ (&
Venkata Vijay Girish K (Huawei Technologies India, India); Ramakrishnan G A (Indian Institute of Science, India); Neeraj Kumar (Huawei Technologies India, India)

Saturday, January 6, 16:00 - 17:00

S&P: Network security and privacy

Distributed Access Control in Wireless Networks¨ˈ (,
Mahmoud Taghizadeh, Amir R. Khakpour, Faezeh Hajiaghajani, Alex X. Liu and Subir Biswas (Michigan State University, USA)

*RansomWall: A Layered Defense System Against Cryptographic Ransomware Attacks Using Machine Learning¨ˈ) **
Saiyed Kashif Shaukat (Indian Institute of Technology Delhi, India); Vinay J. Ribeiro (Indian Institute of Technology, Delhi, India)

SES: Smart Energy System

Room: Grand Ball Room

*Securing Restricted Publisher-Subscriber Communications in Smart Grid Substations¨ˈ *(*
Neetesh Saxena (Bournemouth University, United Kingdom (Great Britain)); Santiago Grijalva (Georgia Institute of Technology, USA); Bong Jun David Choi (The State University of New York (SUNY) Korea & Stony Brook University, Korea)

Efficient Solar Provisioning for Net-Zero Internet-Scale Distributed Networks¨ˈ +&
Vani Gupta and Prashant Shenoy (University of Massachusetts, Amherst, USA); Ramesh K Sitaraman (University of Massachusetts, Amherst & Akamai Technologies, USA)

Thursday, January 4, 13:00 - 16:30

P1: PosterSession1

A Framework for Real-Time Spam Detection in Twitter ¨'' , $
   Himank Gupta and Mohd Saalim Jamal (Indian Institute of Technology, Hyderabad, India);
   Sreekanth Madisetty and Maunendra Sankar Desarkar (IIT Hyderabad, India)

A MAC-PHY Cross-Layer Analysis of NB-PLC System in Presence of Impulsive Noise ¨'' , (
   Yeduri Sreenivasa Reddy and Ankit Dubey (National Institute of Technology Goa, India); Abhinav
   Kumar (Indian Institute of Technology Hyderabad, India)

A Mathematical Equation Solving System Using Accelerometer Sensor ¨'' , ,
   Diksha Shrivastava, Rishabh Sinha and Surbhi Saraswat (IIT (BHU) Varanasi, India); Hari Prabhat
   Gupta (Indian Institute of Technology (BHU) Varanasi, INDIA, India); Tanima Dutta (IIT (BHU)
   Varanasi, India)

A QoE Aware LSTM Based Bit-Rate Prediction Model for DASH Video ¨'' - &
   Anirban Lekharu (IIT Guwahati, India); Satish Kumar (Indian Institute of Technology, Guwahati,
   India); Arijit Sur (Indian Institute of Technology Guwahati, India); Arnab Sarkar (Indian Institute of
   Technology, Guwahati, India)

*A Secure and Light Weight User Authentication System Based on Online Signature Verification
for Resource Constrained Mobile Networks* ¨¨B#5
   Chandra Sekhar Vorugunti (Indian Institute of Information Technology- SriCity, India); Viswanath
   Pulabaigari (Indian Institute of Information Technology SriCity, India)

*Accelerating Hawkes Process for Event History Data: Application to Social Networks and
Recommendation Systems* ¨'' - *
   Ashwin Ram (National Institute of Technology Tiruchirappalli, India); Srijith P. k. (Indian Institute
   of Technology Hyderabad, India)

Caching Policies Under Content Freshness Constraints ¨'($$
   Pawan Poojary (Indian Institute of Technology Madras, India); Sharayu Moharir (Indian Institute of
   Technology Bombay, India); Krishna P Jagannathan (Indian Institute of Technology Madras, India)

Collaborative White Space Detection Based on Sample Entropy and Fractal Theory ¨'($'
   Srinu Sesham (Senior Lecturer & University of Namibia, South Africa); Kranthi Kumar Reddy M
   (Indian Institute of Technology Hyderabad, India); Amit Mishra (University of Cape Town, South
   Africa)

Congestion-Aware Probe Selection for Fault Detection in Networks ¨'($+
   Anuja Tayal (IIT Indore, India); Neminath Hubballi (Indian Institute of Technology Indore, India);
   Maitreya Natu (Tata Research Development and Design Center, India); Vaishali P Sadaphal (Tata
   Research, India)

Cooperative Spectrum Sensing in Full-Duplex CRN with Primary User Activity ¨'(%$
   Santoshkumar Sabat (VNIT Nagpur, India); Prabhat Kumar Sharma (Visvesvaraya National
   Institute of Technology, India); Abhay Gandhi (Viswesarayya National Institute of Technology,
   India)

Covariance and Eigenvalue Based Spectrum Sensing Using USRP in Real Environment ¨'(%(
   Muhammed Althaf, C I (Indian Institute of Space Science and Technology, India); Chris Prema
   (Deemed & Indian Institute of Space Science and Technology, Trivandrum, India)

Data Backup Network Formation with Heterogeneous Agents ¨'(%
   Harshit Jain, Guduru Sai Teja, Pramod Mane and Kapil Ahuja (IIT Indore, India); Nagarajan
   Krishnamurthy (IIM Indore, India)

*Detection of High Rate DDoS Attack from Flash Events Using Information Metrics in Software
Defined Networks* ¨'(&%
   Kshira Sagar Sahoo (National Institute of Technology, Rourkela, India); Mayank Tiwary (SAP Labs
   Bangalore, India); Bibhudatta Sahoo (National Institute of Technology, Rourkela, India)

Dynamic Channel Access of Secondary Users in a Heterogeneous Network Using Game Theory···*(&)*
　　Anusha Jella and Samrat L Sabat (University of Hyderabad, India)

Energy Trading in Sleep Scheduling for Wireless Rechargeable WSNs···*(&-*
　　Mithun Mukherjee and Yunrong Lv (Guangdong Provincial Key Lab of Petrochemical Equipment
　　Fault Diagnosis, P.R. China); Rakesh Matam (Indian Institute of Information Technology Guwahati,
　　India); Nikumani Choudhury (IIIT Guwahati, India)

Fair Resource Allocation with Varying Time Constraints···*(' &*
　　Sreenath Ramanath (Lekha Wireless Solutions, India); Eitan Altman (INRIA, France)

Fast Binary Power Allocation for Uplink Distributed Cognitive Radio Networks···*(')*
　　Dharati N. (IIT Hyderabad, India); Mohammed Zafar Ali Khan (Indian Institute of Technology,
　　Hyderabad, India)

Fog Based Energy Efficient Ubiquitous System···*(' -*
　　Surbhi Saraswat (IIT (BHU) Varanasi, India); Hari Prabhat Gupta (Indian Institute of Technology
　　(BHU) Varanasi, INDIA, India); Tanima Dutta (IIT (BHU) Varanasi, India)

Full-Duplex Multi-User Two-Way Relay Systems with Optimal Scheduling···*((' *
　　Prasanna Raut and Prabhat Kumar Sharma (Visvesvaraya National Institute of Technology, India)

Heat Loss Quantification Using UAS Thermal Imagery···*B#5*
　　Katelyn Koiner (UND, USA); Prakash Ranganathan (University of North Dakota, USA)

Hierarchical Ego Based Community Detection···*B#5*
　　Paramita Dey (Govt. College of Engineering & Ceramic Technology, India); Maitreyee Das
　　(Government College of Engineering & Ceramic Technology, India); Agneet Chatterjee and Sarbani
　　Roy (Jadavpur University, India)

Impact of Spectrum Sharing Rules in Multioperator Communication System···*((+*
　　Sandeep Babasaheb Dhavane (Indian Institute of Technology Hyderabad, India); Mohammed Zafar
　　Ali Khan (Indian Institute of Technology, Hyderabad, India)

Improved Hierarchical Decision Making Policy for Reliable and Green Electricity Grid···*() $*
　　Parikh Jain (DTU, India); Varun Batra (NSIT, India); Sumit Jagdish Darak (IIIT-Delhi, India)

Improved Noise Estimation Using Synchronization Sequences in LTE Downlink···*() (*
　　Tulika Agrawal (Lekha Wireless Solutions Pvt. Ltd.); Yuva Kumar (Lekha Wireless Solutions Private
　　Limited, India); Sreenath Ramanath (Lekha Wireless Solutions, India)

Improved Run Length Limited Codes for VLC Using Dimming Control Compensation Symbols···*() +*
　　Uday Thummaluri, Abhinav Kumar and Lakshmi Prasad Natarajan (Indian Institute of Technology
　　Hyderabad, India)

*IoT Based Equipment Identification and Location for Maintenance in Large Deployment
Industrial Plants*···*(*%*
　　Rahul N. Gore (ABB Corporate Research Center, Bangalore, India); Himashri Kour and Mihit Gandhi
　　(ABB, India)

Lifestyle Authentication and MITHRA Project···*(*(*
　　Ryosuke Kobayashi and Hiroya Susuki (The University of Tokyo, Japan); Nobuyuki Saji (NEC
　　Corporation, Japan); Rie Yamaguchi (The University of Tokyo, Japan)

Lightweight Security Protocol for Chipless RFID in Internet of Things (IoT) Applications···*(*,*
　　Vijay Sharma (IIIT-Delhi, India); Amogh Vithalkar (Indraprastha Institute of Information
　　Technology Delhi, India); Mohammad Hashmi (Nazarbayev University, Kazakhstan & IIIT Delhi,
　　India)

Mitigating the Impact of Unnecessary Active Scans in Heavily Utilized WLANs···*B#5*
　　Dheryta Jaisinghani, Vinayak Naik and Sanjit K Kaul (IIIT Delhi, India); Rajesh K Balan (Singapore
　　Management University, Singapore); Sumit Roy (University of Washington, USA)

Modelling and Validating 1553B Protocol Using the SPIN Model Checker···*(+&*
　　Ranjani Krishnan (Vikram Sarabhai Space Centre, India)

Multilayer Split-protocol ¨*(+**
    Bharat Rawal (Pennsylvania State University, USA)

OFDM Vs FBMC: A Comparative Analysis for Broadband-PLC ¨*(, $*
    Rajprakash Bale, Sai Seetharamaiah, Yeduri Sreenivasa Reddy and Ankit Dubey (National Institute
    of Technology Goa, India); Trilochan Panigrahi (National Institute of Technology, Goa, India)

Optimized Local Call Routing ¨*(, (*
    Siva Karthik (Rashtreeya Vidyalaya College of Engineering, India); Prapulla S b (RVCE, India)

Performance Analysis of High Speed Low-Latency Torus Optical Network ¨*(, ,*
    Abhilasha Sharma and Sangeetha R G (Vellore Institute of Technology, Chennai, India)

*Preliminary Study About Advantageous Trajectory Anonymization Methods Based on
Population* ¨*(- &*
    Toshiro Hikita and Rie Yamaguchi (The University of Tokyo, Japan)

Sub-1 GHz Based Solar Powered Soil Moisture Sensing Network ¨*(- **
    Bhavesh Rathod (College Of Engineering Pune, India); Gautam Havaldar, Vaibhavi Pandit and
    Vikram Bhatia (College Of Engineering, Pune, India)

Towards a Decision-Centric Approach for Securing Cyber Physical Systems ¨*) $$*
    Jithish J and Sriram Sankaran (Amrita University, India)

Understanding the Selectional Preferences of the Twitter Mentions Network ¨*B#5*
    R Sudhesh Solomon (Indian Institute of Information Technology, Sri City); Srinivas Pykl and
    Amitava Das (Indian Institute of Information Technology, Sri City, India)

Wi-Cache: Towards an SDN Based Distributed Content Caching System in WLAN ¨*) $'*
    Lalhruaizela Chhangte (IITB-Monash Research Academy, India); Aditi Garg and D. Manjunath (IIT
    Bombay, India); Nikhil Karamchandani (Indian Institute of Technology Bombay, India)

Thursday, January 4, 14:00 - 17:30

V-3: Graduate Forum

Applications of Mobile Sink in Wireless Sensor Networks ¨*) $+*
    Nimisha Ghosh (Indian Institute of Engineering Science and Technology, India)

Security Issues in Ultra Dense Network for 5G Scenario ¨*) %$*
    Garima Chopra (Shri Mata Vaishno Devi University, India); Rakesh Kumar Jha (School of
    Electronics and Communication Kakryal & Shri Mata Vaishno Devi University, India); Sanjeev Jain
    (Shri Mata Vasihno Devi University, India)

Community Structured Time Varying Communication Networks ¨*) %'*
    Suchi Kumari and Anurag Singh (National Institute of Technology Delhi, India)

*Distributed Algorithms for Opportunistic Spectrum Access in Decentralized Cognitive Radio
Network* ¨*) %**
    Rohit Kumar (NIT Delhi, India)

Automated EBM-oriented Summarization of Active or Recruiting Clinical Trials ¨*B#5*
    Soumyadeep Roy (Indian Institute of Technology, Kharagpur, India)

Achieving Waypoint Enforcement in Multi-VLAN Hybrid SDN ¨*) %-*
    Sandhya Rathee, Mallikarjun Swamy, K Haribabu and Ashutosh Bhatia (Birla Institute of
    Technology and Science, Pilani, India)

Next Generation Cellular Networks and Green Communication ¨*) &&*
    Pimmy Gandotra (Shri Mata Vaishno Devi University, India); Rakesh Kumar Jha (School of
    Electronics and Communication Kakryal & Shri Mata Vaishno Devi University, India)

Low Overhead Adaptive Streaming for Peer-to-Peer Live Video Applications¨**B#5**
　　Ayush Kumar and Abhijit Mondal (IIT Kharagpur, India)

MPTCP QueueAware Scheduler¨**B#5**
　　Tanya Shreedhar (Indraprastha Institute of Information Technology (IIIT) Delhi, India)

Efficient Dynamic Survivable Multicasting in WDM Mesh Networks¨***) &)***
　　Smita Paira (IIEST Shibpur, India)

Speculative Semantics-Based Algorithms to Improve the Performance of a Cloud Storage System¨**B#5**
　　Lakshmi Siva Rama Krishna Talluri (K L University, Guntur, INDIA); Ragunathan Thirumalaisamy (Indian Institute of Design Manufacturing, Kurnool, India)

Design and Implementation of Robotic Wheelchair¨***) &,***
　　Sreenidhi Dr (Visvesvaraya Technological University & Global Academy of Technology, India)

A Traffic Engineering Framework for Maximizing Network Revenue in Software Defined Network¨***) ' %***
　　Vishal Agarwal (IIT (BHU) Varanasi, India); Surbhi Saraswat (IIT (BHU) Varanasi, India); Hari Prabhat Gupta (Indian Institute of Technology (BHU) Varanasi, INDIA, India); Tanima Dutta (IIT (BHU) Varanasi, India)

An Interactive Writing Monitoring System for Kids¨***) ' (***
　　Surbhi Saraswat (IIT (BHU) Varanasi, India); Hari Prabhat Gupta (Indian Institute of Technology (BHU) Varanasi, INDIA, India); Tanima Dutta (IIT (BHU) Varanasi, India)

A Smart Experience Sampling Method for Smartphone Based Emotion Detection¨**B#5**
　　Surjya Ghosh (IIT Kharagpur, India)

IoT Based Indoor Environment Data Modelling and Prediction¨***) ' +***
　　Praveen Kumar Sharma (National Institute of Technology, Durgapur, India); Tanmay De (National Institute of Technology (NIT), Durgapur, West Bengal, India); Sujoy Saha (National Institute of Technology, India)

An Unsupervised Heuristic Based Approach for Author Name Disambiguation¨***) ($***
　　KM Pooja (Indian Institute of Technology, Patna); Samrat Mondal (IIT Patna, India); Joydeep Chandra (Indian Institute of Technology Patna, India)

Optimizing Flow Setup Time in SDN¨***) ('***
　　Abha Kumari (IIT PATNA, India); Joydeep Chandra (Indian Institute of Technology Patna, India); Ashok Singh Sairam (Indian Institute of Technology Guwahati, India)

Understanding the Impact of Unnecessary Active Scans in WLANs
　　Dheryta Jaisinghani and Vinayak Naik (IIIT Delhi, India)

SkyHelp: Leveraging UAVs for Emergency Communication Support in Deep Open Pit Mines¨***) (****
　　Alok Ranjan (National Institute Of Technology, Rourkela, India); Bighnaraj Panigrahi (Tata Consultancy Services, India); H Sahu (NIT Rourkela, India); Prasant Misra (TATA Consultancy Services, India)

Wednesday, January 3, 09:30 - 11:00

S1: WACI meets the Crowd

SafeStreet: An Automated Road Anomaly Detection and Early-Warning System Using Mobile Crowdsensing¨***) (-***
　　Vikrant Singh, Deepthi Chander and Umang Chhaparia (IIT Bombay, India); Bhaskaran Raman (Indian Institute of Technology, Bombay, India)

Wednesday, January 3, 11:00 - 13:00

S2: The |D2Da| Devil is in the Sc@le

Scalable Measurement of Air Pollution Using COTS IoT Devices¨))'
Varun Jain, Mansi Goel, Mukulika Maity and Vinayak Naik (IIIT Delhi, India); Ramachandran Ramjee (Microsoft Research, India)

Can We Recognize Multiple Human Group Activities Using Ultrasonic Sensors?¨))+
Arindam Ghosh, Dhruv Chakraborty and Deepak Prasad (B C Roy Engineering College, India); Mousumi Saha (IIEST, Shibpur, India); Sujoy Saha (National Institute of Technology, India)

The Applicability of Blockchain in the Internet of Things¨)*%
Yash Gupta (Indian Institute of Technology Delhi, New Delhi, India); Rajeev Shorey (TCS Innovation Lab, India); Devadatta Kulkarni and Jeffrey Tew (TCS Innovation Labs, USA)

Managing Large-Scale Transient Data in IoT Systems¨)*)
Nanjangud Narendra (Ericsson, India); Sambit Nayak and Anshu Shukla (Ericsson Research Bangalore, India)

Wednesday, January 3, 14:00 - 16:00

S3: The Future of Industry at Crossroads

Wednesday, January 3, 16:30 - 17:00

S4: The Carrier Wave put to Best Use

Implementation of Relay Hopper Model for Reliable Communication of IoT Devices in LTE Environment Through D2D Link¨)*-
Anish Pradhan, Soumi Basu, Sreetama Sarkar and Saptarshi Mitra (National Institute of Technology, Durgapur, India); Sanjay Dhar Roy (National Institute of Technology Durgapur, India)

Co-iOAM: In-situ Telemetry Metadata Transport for Resource Constrained Networks Within IETF Standards Framework¨)+'
Rashmi Ballamajalu, Anand S. v. r. and Malati Hegde (Indian Institute of Science, India)

Wednesday, January 3, 17:00 - 17:30

S5: WACI MasterApps

Wednesday, January 3, 10:10 - 10:30

S1: Session 1

Next Generation Distributed and Networked Autonomous Vehicles: Review¨)++
Siby Plathottam and Prakash Ranganathan (University of North Dakota, USA)

Wednesday, January 3, 11:30 - 13:00

S2: Session 2

Mining Bus Stops from Raw GPS Data of Bus Trajectories¨),'
Nandani Garg (Indian Institute of Technology, Madras, India); Gitakrishnan Ramadurai and Sayan Ranu (IIT Madras, India)

Training a Deep Learning Architecture for Vehicle Detection Using Limited Heterogeneous Traffic Data¨),-
Deepak Mittal and Gitakrishnan Ramadurai (IIT Madras, India); Kaushik Mitra (Indian Institute of Technology, Madras, India); Balaraman Ravindran (Indian Institute of Technology, Chennai, India)

A Way to Measure and Analyze Cellular Network Connectivity on the Norwegian Road System¨)-)
Ergys Puka (Norwegian University of Science and Technology - NTNU, Norway); Peter Herrmann (Norwegian University of Science and Technology, Norway); Tomas Levin and Christian Skjetne (Norwegian Public Road Administration, Norway)

Segmentation of Vehicle Signatures from ILD Data for Real-Time Traffic Monitoring¨*$%
Niraj Kumar Singh, Lelitha Vanajakshi and Arun Tangirala (IIT Madras, India)

Wednesday, January 3, 14:00 - 15:30

S3: Session 3

Bus Schedule for Optimal Bus Bunching and Waiting Times¨*$+
M Venkateswararao K (Indian Institute of Technology, Bombay, India); Veeraruna Kavitha (IIT Bombay, India); Urtzi Ayesta (CNRS-IRIT and Ikerbasque-University of the Basque Country, Spain)

Transit Assignment with Strict Capacity Constraints in Presence of Countdown Information¨*%
Padma S (CSIR-CRRI & CSIR-CRRI, India); Velmurugan S (Traffic Engineering Department, CSIR-Central Road Research Institute, India)

Updating a Robust Optimization Model for Improving Bus Schedules¨*%
Yassine Baghoussi (LIAAD - INESC TEC, University of Porto, Portugal); João Mendes-Moreira (LIAAD - INESC TEC & Faculty of Engineering, University of Porto, Portugal); Michael Emmerich (LIACS, Leiden University, The Netherlands)

Transit Timetables as Multi-layer Networks¨*&)
Prasad Talasila (Birla Institute of Technology and Science, Pilani - KK Birla Goa Campus, India); Asifullah Shaik (BITS Pilani - KK Birla Goa Campus, India); Neena Goveas (BITS Pilani K K Birla Goa Campus, India); Bharat Deshpande (Birla Institute of Technology and Science, Pilani - KK Birla Goa Campus, India)

Sunday, January 7, 09:10 - 10:30

S1: Session 1

Modeling Opinion Dynamics in a Social Network Using Markov Random Field¨*'%
Kundan Kandhway (TCS Innovation Labs Chennai, India)

Sunday, January 7, 11:00 - 13:00

S2: Session 2

Knowledge Based Community Detection in Online Social Network…*'+
> Paramita Dey (Govt. College of Engineering & Ceramic Technology, India); Agneet Chatterjee and Sarbani Roy (Jadavpur University, India)

Design and Implementation of Small Multiples Matrix-based Visualisation to Monitor and Compare Email Socio-organisational Relationships…*('
> Mithileysh Sathiyanarayanan, Cagatay Turkay and Odunayo Fadahunsi (City, University of London, United Kingdom (Great Britain))

A Novel Overlapping Community Detection Using Parallel CFM and Sequential Nash Equilibrium…*(-
> Aparna Sarswat (National Institute of Technology Karnataka, India); Ram Mohana Reddy Guddeti (NITK, Surathkal, India)

Sunday, January 7, 14:00 - 16:00

S3: Session 3

TRAFAN: Road Traffic Analysis Using Social Media Web Pages…*))
> Badrinaaraayanan Akilesh, Nagendra Kumar, Bharath Reddy and Manish Singh (Indian Institute of Technology Hyderabad, India)

Sunday, January 7, 16:30 - 18:00

S4: Session 4

Centralized and Epidemic Dissemination of Security Patches…**$
> Kundan Kandhway (TCS Innovation Labs Chennai, India)

Sunday, January 7, 09:30 - 10:30

S1: Session 1

Prevention of Avoidable Blindness and Improving the Eye Healthcare System in India…**)
> Sharanya Rajan (Nayonika Eye Care Charitable Trust, India)

Comparative Study to Determine the Reliability and Accuracy of the Fetal Lite Electronic Fetal Monitor When Compared with Conventional Cardiotocography…*+%
> Kishore Subramanian, Sumedh Kaulgud and Vibhav Joshi (Sattva MedTech Pvt. Ltd., India)

MoRe-care: Mobile-Assisted Remote Healthcare Service Delivery…*++
> Safikureshi Mondal (Narula Institute of Technology, India); Nandini Mukherjee (Jadavpur University, India)

Leveraging Virtual Testing for Safer Medical Device Development…*, &
> Adaikkammai S, Evangeline Smita and Appaji M Abhishek (B M S College of Engineering, India)

Opto-Electronic System for Intravenous Infusion Monitoring…*, ,
> Sourabh Alagundagi, Krupakar Pasala and Manish Arora (Indian Institute of Science, India)

Sunday, January 7, 14:00 - 15:00

S2: Session 2

Leveraging Simulation for Usability Engineering of Medical Devices¨¨*-'
    Pradyumna M, Amrutha Raja and Meghana A (B M S College of Engineering, India)

Technical Assessment of a Low Cost Multi-powered Continuous Positive Airway Pressure (CPAP) Device¨¨*--
    Nitesh Kumar Jangir (Coeo Labs, India); Basava Mukkundi (COEO LABS PVT LTD & COEO LABS PVT LTD, India); Nachiket Deval (COEO LABS PVT LTD, India)

Use of Portable EEG Sensors to Detect Meditation¨¨+$)
    Dilnashin Anwar and Prince Garg (IIIT-Delhi, India); Vinayak Naik (IIIT Delhi, India); Anubha Gupta (Indraprastha Institute of Information Technology Delhi, India); Akshay Kumar (IIIT Delhi, India)

Review of an Electronic Health Record Model to Facilitate Remote Patient Management in Metabolic and Lifestyle Diseases¨¨+%%
    Vivek Kadambi and Nilima Kadambi (Belle Sante Institute, India)