ANTS 2015 : Program Schedule

Dec. 15, 2015, Tuesday

TUTORIAL
9:00 AM – 5:00 PM
Registration

9:30 AM – 1:00 PM
Morning Session

Venue: PJA Auditorium
T1
Road to 5G Wireless Systems: Challenges Ahead vis-a-vis Progress Made
Speakers: Amitava Mukherjee, IBM and Debasis Saha, IIM, Kolkata

Venue: NAB I
T2
Large-Scale Optimization: Meta-Heuristics and Decomposition Techniques
Speaker: Brigitte Jaumard, Concordia University

11:00 AM - 11:15 AM
Tea/Coffee Break

1:00 PM - 2:00 PM
Lunch

2:00 PM – 5:30 PM
Afternoon Session

Venue: PJA Auditorium
T3
Social Media - The Good, Bad and Ugly: A Tutorial on Computational Social Network Analysis
Speaker: Nitin Agarwal, University of Arkansas, Little Rock

Venue: NAB I
T4
Stochastic Geometry for the Analysis of Cellular Networks
Speaker: Radha Krishna Ganti, IIT Madras

3:30 PM - 3:45 PM
Tea/Coffee Break

Dec. 16, 2015, Wednesday

9 AM – 5 PM
Registration

9:30 AM –10:00 AM
Inauguration

10:00 AM -10:45 AM
Keynote Talk 1

Venue: PJA Auditorium
Title: What on Earth is a Smart City?
Speaker: Bhaskar Ramamurthi, IIT Madras

10:45 AM -11:00 AM
Tea/Coffee Break

11:00 AM – 1:15 PM
Session 1

Venue: PJA Auditorium
Invited Talk 1: Green Optical Networks
Speaker: Lena Wosinska, KTH

Track 1A: Optical Networks
1. MCRB for Synchronization Parameters Offset in the Presence of Self-Phase Modulation in Coherent Optical Communication
   Debarati Sen, IIT Kharagpur, India

2. Designing a Green Optical Network Unit using ARMA-based Traffic Prediction
   Chayan Bha, Nillesh Chatur, Atri Mukhopadhyay, Goutam Das, Debasis Datta, IIT Kharagpur, India

3. Efficient Relocation of Virtual Spare Resources over Optical Backbone Networks
   Ferhat Dikbiyik, Sakarya University, Turkey; Biswanath Mukherjee, UC Davis, USA

4. A Heuristic Algorithm for Network Optimization of OTN over DWDM Network

5. Benefits of Sliceable Photonic based Transponders in Metro Networks (Short Paper)
   Sourav Das, Onur Turkoz, Anuj Malik, Pravin Mahajan, Biao Lu, Infinera Corporation, USA

Venue: NAB I
Invited Talk 2: A Navigation System to Assist Passengers Traveling in Indian Public Buses
Speaker: Niloy Ganguly, IIT Kharagpur

Track 1B: LTE Networks
1. Reconfigurable and Efficient Fronthaul of 5G Systems
   Divya Chimalla, UC Davis, USA; Koteswararao Kondapu, Luca Valcarenghi, Scuola Superiore Sant’Anna, Italy; Biswanath Mukherjee, UC Davis, USA

2. LTE - Wi-Fi Coexistence in 5 GHz Band
   Vaishakh Janardhanan, Nishad Muhammed, Venkatarao Goguguntla, Nadeem Ahttar, Centre of Excellence in Wireless Technology, IIT Madras Research Park, India

3. NeSen - A Tool for Measuring Link Quality and Stability of Heterogeneous Cellular Network
   Rashid Kumar Mistri, Rameshkrishan Pandey, F.G.I.E.T, India; Nabendu Chaki, Sankhayan Choudhury, University of Calcutta, India

4. Techno-Economic Assessment of the Potential for LTE based 4G Mobile Services in Rural India
   Ashutosh Jha, Debasis Saha, IIM Calcutta, India

5. A Resilient Packet Ring based Backhaul for LTE Networks that Reduces Handover Latency
   Atri Mukhopadhyay, Goutam Das, IIT Kharagpur, India
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<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>9:00 AM</td>
<td>Registration</td>
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<tr>
<td>1:15 PM – 2:15 PM</td>
<td>Lunch</td>
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<tr>
<td>2:15 PM – 3:15 PM</td>
<td>Panel 1</td>
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<tr>
<td><strong>Title:</strong> On Developing Smart Cities: Socio-Technological Challenges and Opportunities <strong>Panelists:</strong> Debasish Sen (Principal Secretary, in-charge of Smart Cities initiative in WB), Vijayakumar Kabir (Wipro), Prasant Misra (Robert Bosch Centre for Cyber Physical Systems), Deepak Kataria (IP Junction), Balsamurari P (TCS), Mukesh Taneja (Cisco)</td>
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<td>3:15 PM – 4:00 PM</td>
<td>Keynote Talk 2</td>
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<td><strong>Title:</strong> LTE License Assisted Access (LAA) - Way Forward for 5G <strong>Speaker:</strong> Anantha Simha, TCS</td>
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<td>4:00 PM – 4:15 PM</td>
<td>Tea/Coffee Break</td>
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<tr>
<td>4:15 PM – 6:00 PM</td>
<td>Session 2</td>
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<tr>
<td>6:30 PM - 9:00 PM</td>
<td>Cultural Program / Welcome Dinner</td>
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<td><strong>Dec. 17, 2015, Thursday</strong></td>
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<tr>
<td>9:30 AM – 5 PM</td>
<td>Registration</td>
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<tr>
<td>9:30 AM – 11:00 AM</td>
<td>Session 3</td>
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<td>11:00 AM – 11:15 AM</td>
<td>Tea/Coffee Break</td>
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<tr>
<td>11:15 AM – 12:00 PM</td>
<td>Keynote Talk 3</td>
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<tr>
<td><strong>Title:</strong> Optical Access Networks - Technology and Challenges in Indian Markets <strong>Speaker:</strong> Bharat Dave, Alphion Corp.</td>
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<tr>
<td>12:00 PM – 12:45 PM</td>
<td>Keynote Talk 4</td>
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<tr>
<td><strong>Title:</strong> Network Transformation in the Cloud Era <strong>Speaker:</strong> Utkarsh Rai, Infinera</td>
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</table>
1:10 PM – 2:00 PM
Venue: PJA Auditorium
Lunch

2:00 PM – 2:45 PM
Venue: PJA Auditorium

Title: Optical Networks: Technology and Challenges in Indian Market
Panelists: Bharat Dave (Alphion), Somnath Maji (Former CQM, BSNL), Utkarsh Rai (Infinera), Anuj Malik (Infinera)

2:45 PM – 4:00 PM
Venue: PJA Auditorium

Track 4A: Transport Networks

1. Dynamic Link Adaptation for High Throughput Wireless Access Networks
Raka Karmakar, Techno India College of Technology Kolkata, India; Samiran Chattopadhyay, Jadavpur University, Kolkata, India; Sandip Chakraborty, IIT Kharagpur, India

2. INFLATE: Incremental Wireless Transmission for Sensor Information in Industrial Environments
Roman Naumann, Stefan Dietzel, Bjorn Schuemann, Humboldt-Universitat zu Berlin, Berlin, Germany

3. Topology Aware Flow Scheduling for Data Center Network
Kapil Sharma, Venkataramana Badarla, Indian Institute of Technology Jodhpur, India

4. Experimentation and Analysis of Multipath TCP (Short Paper)
Anilal P, B V Sainandan, Siva Sankara Sai S, Department of Physics, Sri Sathyai Sai Institute of Higher Learning, Prasanthinilayam, India; Prabhakara Yellai, Cisco Systems, Inc, Bangalore, India

4:00 PM – 4:15 PM
Tea/Coffee Break

4:15 PM – 4:40 PM
Venue: PJA Auditorium

Title: Telco 2020 - Delivering new experiences
Speaker: Ayan Mukerji, Wipro Technologies

4:40 PM – 5:40 PM
Ph.D. Student Forum/ Poster Session/ Demo/ Exhibits/ Talk from Springer

Venue: NAB I

Ph.D. Student Forum

1. Enhancement of Wireless Sensor Network Lifetime by Clustering Technique
Veena Anand, Department of Information Technology, National Institute of Technology, Raipur, India

2. Gathering of Anonymous and Oblivious Fat Robots with Limited Visibility without Collision
Debashis Pattnayak, Department of Mathematics Indian Institute of Technology Guwahati

3. Power Optimization and Security Analysis of 5G Wireless Communication Networks
Akhil Gupta, School of Electronics and Communication Engineering Shri Mata Mata Vaishno Devi University Katra, India

4. Cross Layer Adaptive TCP Congestion Control in IEEE 802.11e QoS MAC in Mobile Ad Hoc Networks
Mahadev Gawas, Department of Computer Science BITS PILANI K.K. Birla Goa campus

5. Distributed Coverage and Area Estimation in Wireless Sensor Networks
Dibakar Saha, Advanced Computing & Microelectronics Unit Indian Statistical Institute, Kolkata, India

Venue: NAB II

Demo/Exhibits

1. NetSim™ -Model, Predict, Validate. Intelligent Network Design TETCOS

CSIR-Central Mechanical Engineering Research Institute, Durgapur

3. pProf: Component Utilization Based Power Consumption Model for Estimating Energy Cost in Internet of Context Sensing Things (IoCST)
Shiv-Nadar University

4. Agriculture IoT - A Step Towards Smart Farming
Sri Sathyai Sai Institute of Higher Learning

5. Demonstration of a Smart Communication System using LiFi
Sri Sathyai Sai Institute of Higher Learning

4:40 PM – 5:40 PM
Venue: PJA Auditorium Foyer

Poster Session

1. New Protocols for Quantum Public Key Cryptography
Akhilesh Parakh, University of Nebraska at Omaha, USA

2. Co-channel Interference Constrained Spectrum Allocation with Simultaneous Power and Network Capacity Optimization using PSO in Cognitive Radio Network
Seemanti Saha and Pratik Tiwari, National Institute of Technology Patna, India

Abhijit Bhowmick, Sanjay Dhar Roy, Sumit Kundu, NIT, Durgapur, India

4. Low Complexity Signal Detection Technique for SFBC-OFDM Systems
Jyoti Patra, National Institute of Technology Rourkela, India

5. Real-time Monitoring of Network Latency in Software Defined Networks
Akhil Gupta, School of Electronics and Communication Engineering Shri Mata Mata Vaishno Devi University Katra, India
6. Dynamic Virtual Backbone based Routing in Cognitive Radio Networks  
Monisha Devi, Nityananda Sarma, Sanjib Kr. Deka, Tezpur University, India

Rajiv Kumar, Jaypee University of Information Technology, India; Piotr A Cholda, AGH University of Science and Technology, Poland

Nikhil Tripathi and Neminath Hubballi, Indian Institute of Technology Indore, India

4:40 PM – 5:40 PM  
Talk from Springer  
Venue: PJA Auditorium

How to Write for and Get Published in International Scientific Journals  
Speaker: Swati Mehereshi, Springer

7:00 PM – 9:00 PM  
Conference Banquet Dinner

Dec. 18, 2015, Friday

9 AM – 1 PM  
Registration

9:30 AM – 11:30 AM  
Session 5  
Venue: PJA Auditorium

Track 5A: SDN and Network Virtualization

1. Dynamic Multi-hop Switch Handoffs in Software Defined Wireless Mesh Networks  
Aditya Vamsi Mamidi, Sarath Babu, B. S. Manoj, Indian Institute of Space Science and Technology, Thiruvananthapuram, India

2. Cross-Layer Switch handover in Software Defined Wireless Networks  
Yashwanth Reddy, Indian Institute of Space Science and Technology, Thiruvananthapuram, India; Dip Krishnaswamy, IBM Research Labs, Bangalore, India; B. S. Manoj, Indian Institute of Space Science and Technology, Thiruvananthapuram, India

3. Carbon-Aware Routing in Software Defined Inter Data Center Network  
Deepshikha Singh, Graphic Era University, Dehradun, Uttarakhand, India; Gitanjali Chandwani, G. S. Sanyal School of Telecommunication, I.I.T Kharagpur, India

4. An Open Source based Network as a Service (NaaS) Platform for Cloud Provisioning  
Shameemraj M Nadad, Hemant Kumar Rath, Arun Kumar A V, Samar Shalendr, Anantha Simha, CTC Networks Lab, Bangalore, Tata Consultancy Services Ltd, India

5. A Hybrid Queuing Model for Virtual Machine Placement in Cloud Data Center (Short Paper)  
Abhishek Gupta, M. Farhan Habib, Pulak Chowdhury, Massimo Tomatore, Biswanath Mukherjee, University of California, Davis, USA

6. On Service Chaining using Virtual Network Functions in Network-enabled Cloud Systems (Short Paper)  
Abhishek Gupta, M. Farhan Habib, Pulak Chowdhury, Massimo Tomatore, Biswanath Mukherjee, University of California, Davis, USA

11:30 AM - 11:55 AM  
Invited Talks  
Venue: PJA Auditorium

Invited Talk 4: A Scalable Model for Multi-period Virtual Network Mapping for resilient Multi-site Data Centers  
Speaker: Brigette Jaumard, Concordia Univ.

Invited Talk 5: Hybrid plasmonics for computer interconnects and sensing  
Speaker: Lech Wosinski, KTH, Sweden

11:55 AM – 12:10 PM  
Tea/Coffee Break

12:10 PM - 12:55 PM  
Keynote Talk 6  
Venue: PJA Auditorium

Title: Smart Sensing with Smart Sensors  
Speaker: Prasant Mohapatra, UC Davis

12:55 PM – 1:20 PM  
Invited Talk 6  
Venue: PJA Auditorium

Title: Cyber Security : Some Thoughts  
Speaker: Mr. Susheel Verma, DRDO

1:20 PM – 2:15 PM  
Lunch
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<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>2:15 PM – 3:00 PM</td>
<td>Panel 3</td>
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<tr>
<td>Venue: PJA Auditorium</td>
<td>Title: Make in India: Leapfrogging to the Next Generation Telecom Technologies</td>
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<tr>
<td>Panelists: Goutam Kr. Audhya (Bharat Broadband Network Limited), K V S Hari (IISc), Susheel Verma (DRDO), Sudhir Dixit (Basic Internet Foundation), Pamela Kumar (CCICI)</td>
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<td>3:00 PM – 3:45 PM</td>
<td>Keynote Talk 7</td>
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<td>Venue: PJA Auditorium</td>
<td>Title: TBD</td>
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<td>Speaker: Cisco</td>
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<td>3:45 PM – 4:10 PM</td>
<td>Invited Talk 7</td>
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<tr>
<td>Venue: PJA Auditorium</td>
<td>Title: Evolution of Packet-Optical in Transport Networks</td>
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<td>Speaker: Mohit Mishra, Infinera</td>
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<td>4:10 PM - 4:30 PM</td>
<td>Tea/Coffee Break</td>
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<tr>
<td>4:30 PM – 6:15 PM</td>
<td>Session 6</td>
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<tr>
<td>Venue: NAB I</td>
<td>Track 6A: Internet of Things</td>
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<tr>
<td>1. CAPCoS: Context-aware PAN Coordinator Selection for Soldiers-Health Monitoring in Battlefield</td>
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<tr>
<td>Soumen Moulik, Sudip Misra, Chandan Chakraborty, Indian Institute of Technology, Kharagpur, India</td>
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<td>2. Target Coverage using a Collaborative Platform for Sensor Cloud (WSN)</td>
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<td>Biplob K. Sen, Sunirmal Khatua, Rajib K. Das, Department of Computer Science and Engineering, University of Calcutta, India</td>
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<td>3. Enhancing 6LoWPAN Schemes to Support Priority Driven Routing</td>
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<td>Ranabir Saha, Suman Sankar Bhunia, Nandini Mukherjee, Jadavpur University, Kolkata, India</td>
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<td>4. Mechanism for Adaptive and Context-aware Inter-IoT Communication (IoT)</td>
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<td>Sudipta Ghosh, Head Intellectual Property Management Wipro Limited, India; Swaminathan Seetharaman, DMTS-Senior Member Wipro Limited, India</td>
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<td>5. An IoT based 6LoWPAN enabled Smart Water Flow Meter System for India (IoT)</td>
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<td>Anjana S, Sahana M N, Arkeith S, K Natarajan, K R Shobha, Department of Telecommunication Engineering M S Ramnath Institute of Technology Bangalore, India; A Paventhan, Education &amp;Research Network (ERNET) India</td>
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<td>6:15 PM – 6:30 PM</td>
<td>Concluding Ceremony</td>
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<td>Venue: PJA Auditorium</td>
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<td>6:15 PM – 6:30 PM</td>
<td>Track 6B: Network Applications II</td>
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<tr>
<td>1. Decision Making in Assessment of RRAP of WSN using Fuzzy-Hybrid Approach</td>
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<tr>
<td>Avishhek Banerjee, Asansol Engineering College, Asansol, Mihai Gavrilas, Gheorghe Grigoras, Electrical Engineering Faculty, “Gheorghe Asachi” Technical University of Iasi, Romania, Samiran Chattopadhyay, Jadavpur University, Kolkata, India</td>
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<td>2. Adaptive Path Selection for High Throughput Heterogeneous Wireless Mesh Networks</td>
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<td>Armita Bose Paul, Dept of CSE IIT Guwahati, Assam, India; Sandip Chakraborty, Dept of CSE IIT Kharagpur; Sudhishel De, Dept of CSE, IIT Guwahati, Assam, India; Sukumar Nandi, Santosh Biswas, Dept of CSE IIT Guwahati, Assam, India</td>
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<td>3. Maximum Lifetime Scheduling for Area Coverage in Wireless Sensor Networks</td>
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<td>Ritamshirsa Choudhuri, Rajib K Das, Department of Computer Science and Engineering University of Calcutta</td>
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<td>4. Behavioral Epidemic Analysis on Random Graph Model for Smart Wireless Networks</td>
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<td>Rohit Kumar Singh, H. S. Jamadagni, Department of Electronic Systems Engineering Indian Institute of Science Bangalore, India</td>
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<td>5. Political Ally: Finding Political Friends on Twitter (Short Paper)</td>
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<td>Suchita Jain , Vanya Sharma, Rishabh Kaushal, Department of Information Technology Indira Gandhi Delhi Technical University for Women, Delhi, India</td>
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<td>6. Rumor Detection in Twitter: An Analysis in Retrospect (Short Paper)</td>
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<tr>
<td>Raveena Dayam, Nikita Chhabra, Tarana Kadian, Rishabh Kaushal, Department of Information Technology Indira Gandhi Delhi Technical University for Women, Delhi, India</td>
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- The presentation slot for each long paper is of duration 20 min.s, and for short paper is of 10 min.s.