



WoWMoM 2015
14-17 June, Boston, USA

**Sponsored by IEEE Computer Society, Missouri University Of Science and Technology,
and IEEE Technical Committee on Computer Communications (TCCC)**



WoWMoM 2015 Program

Sunday June 14th		Monday June 15th		Tuesday June 16th		Wednesday June 17th			
8:30-9:00	Registration	8:30-9:00	Registration & Welcome	8:30-9:30	Keynote II: Smart-Sensing using Smart-Sensors, Prof. Prasant Mohapatra, Vice Chancellor, UC Davis	8:30-10:00	7A: Network Analysis & Diagnosis	7B: Opportunistic Networks & Prediction Mechanisms	
9:00-10:00	IoT-SoS (CGS 421) AOC (CGS 423) SmartVehicles (CGS 521) VidEv (CGS 523) CORAL (CGS 527)	9:00-10:00	Keynote 1: Michael Luby VP Technology at Qualcomm	9:30-10:00	Coffee Break	10:00 - 10:30	Coffee Break		
10:00-10:30	Coffee Break	10:00-10:30	Coffee Break	10:00-11:30	4A: Dynamic Spectrum Access	4B: Internet of Things	10:30-12:00	8A: Resource Management & QoS/QoE Provisioning	8B: Topology-Aware Networking
10:30-12:00	Sessions - all workshops	10:30-12:00	1A: Video Streaming	11:30-1:00 PM	Lunch Break		12:00 - 1:30 PM	Lunch Break	
12:00-1:30 PM	Lunch Break	12:00-1:30 PM	Lunch Break	1:00-2:30 PM	Panel: Security & Privacy in the Internet of Things		1:30-3:00 PM	9A: Modeling, Measurements & Performance Analysis	9B: Video Broadcast & Distribution
1:30-3:00 PM	Sessions - all workshops	1:30-3:00 PM	2A: Dynamic Offloading & Scheduling	2:30-3:00 PM	Coffee Break				
3:00-3:30 PM	Coffee Break	3:00-3:30 PM	Coffee Break	3:00-4:30 PM	5A: Localization & Positioning	5B: Security & Privacy Issues			
3:30-5:30 PM	CORAL only	3:30-5:00 PM	3A: WSN Data Dissemination & Gathering	4:30-5:00 PM	Coffee Break				
RECEPTION (6-8pm)		5:00-6:30 PM	Work in Progress & Demo Session	5:00-6:30 PM	Session 6: PhD Forum				
				DINNER (7-9:30pm)					

Keynote 1: Converged Internet and Broadcast Media Delivery

Speaker: Michael Luby, Vice President, Technology, Qualcomm, Inc.

Monday June 15th - 9:00 AM (CGS 129)

Keynote 2: Smart-Sensing using Smart-Sensors

Speaker: Prasant Mohapatra, University of California, Davis.

Tuesday June 16th - 8:30AM (CGS 129)

Panel: Privacy and Security in the Internet of Things

Panelists:

Prithwish Basu, Raytheon BBN Technologies, Cambridge MA, USA (Panel Chair)

Fernando Boavida, Universidade de Coimbra, Portugal (Panel Chair)

Thomas Little, Boston University, Boston MA, USA

Partha Pal, Raytheon BBN Technologies, Cambridge MA, USA

Torsten Braun, University of Bern, Switzerland

Jorge Sá Silva, University of Coimbra, Portugal

Tuesday June 16th - 1:00 - 2:30pm (CGS 129)

Opening Reception

Sunday June 14th - 6-8pm

The BU Castle: 225 Bay State Rd, Boston, MA 02215

Dinner Banquet

Tuesday June 16th - 7-9:30pm

Trustee Ballroom & Lounge: 1 Silber Way, 9th Floor, Boston, MA 02215

Monday June 15th

Registration (8:30 – 9:00am): CGS Lobby

Welcome & Keynote 1 (9:00 – 10:00am)

Room: CGS 129 (Jacob Sleeper Auditorium)

Coffee break (10:00 – 10:30am): 5th floor alcove

SESSION 1A: Video Streaming (10:30am – 12:00pm)

Chair: Torsten Braun, Room: CGS 505

Green Video Delivery in LTE-based Heterogeneous Cellular Networks

Apostolos Galanopoulos (University of Thessaly, Greece); George Iosifidis (Yale University, USA); Antonios Argyriou (University of Thessaly, Greece); Leandros Tassioulas (Yale University, USA)

QoE-aware optimization for video delivery and storage

Alisa Devlic (Royal Institute of Technology (KTH), Sweden); Pavan Kumar Kamaraju (University Of Maryland Baltimore County & Royal Institute Of Technology KTH, USA); Pietro Lungaro (Royal Institute of Technology (KTH), Sweden); Zary Segall (KTH Royal Institute of Technology, Sweden); Konrad Tollmar (Royal Institute of Technology (KTH), Sweden)

Mobile HTTP-based streaming using flexible LTE base station control

Izhak Rubin (University of California at Los Angeles, USA); Stefania Colonnese (Università La Sapienza di Roma, Italy); Francesca Cuomo (University of Rome Sapienza, Italy); Federica Calanca (University of Rome Sapienza, Italy); Tommaso Melodia (Northeastern University, USA)

SESSION 1B: Mobility & Handover Management (10:30am – 12:00pm)

Chair: Jérôme Härri, Room: CGS 527

Network architecture supporting seamless flow mobility between LTE and WiFi networks

Dhathri R. Purohith and Aditya Hegde (IIT Madras, India); Krishna M. Sivalingam (Indian Institute of Technology Madras, India)

A Hybrid Centralized-Distributed Mobility Management Architecture for Network Mobility

Tien-Thinkh Nguyen (EURECOM, France); Christian Bonnet (Institut Eurecom, France)

Handover triggering in IEEE 802.11 Networks

Nicolas Montavont (Institut Mines Telecom / Telecom Bretagne, France); Alberto P Blanc and Renzo Navas (Telecom Bretagne, France); German Castignani (University of Luxembourg / SnT, Luxembourg)

Lunch (12:00 – 1:30pm)

West Campus Dining Hall: 275 Babcock Street, Boston, MA 02215

SESSION 2A: Dynamic Offloading and Scheduling (1:30 – 3:00pm)

Chair: Vasilios Siris, Room: CGS 505

Offload (Only) the Right Jobs: Robust Offloading Using the Markov Decision Processes

Esa Hyttiä (Aalto University, Finland); Thrasylvoulos Spyropoulos (EURECOM, France); Joerg Ott (Aalto University, Finland)

Towards Optimal Priority and Deadline Driven Scheduling in Dynamic Wireless Environments

Viral Patel (State University of New York at Buffalo, USA); Nicholas Mastronarde (University at Buffalo, USA); Michael Medley (Air Force Research Laboratory, USA); John D. Matyjas (Air Force Research Laboratory, Rome, NY, USA)

Minimum Delay Scheduling with Multi-Packet Transmission in Wireless Networks

Ali Abbasi and Majid Ghaderi (University of Calgary, Canada)

SESSION 2B: Mobility Management in WSNs (1:30 – 3:00pm)

Chair: Nils Aschenbruck, Room: CGS 527

Lifetime Optimization with QoS of Sensor Networks with Uncontrollable Mobile Sinks

Francesco Restuccia and Sajal K. Das (Missouri University of Science and Technology, USA)

Analysis of Deployment and Movement Policies in Wireless Sensor and Robot Networks

Andrew Wichmann and Turgay Korkmaz (University of Texas at San Antonio, USA)

Water Flow Driven Sensor Networks for Leakage and Contamination Monitoring

Amitangshu Pal and Krishna Kant (Temple University, USA)

Coffee break (3:00 – 3:30pm): 5th floor alcove

SESSION 3A: WSN Data Dissemination and Gathering (3:30 – 5:00pm)

Chair: Yonghe Liu, Room: CGS 505

Ripple: High-throughput, Reliable and Energy-efficient Network Flooding in Wireless Sensor Networks

Dingwen Yuan (Technische Universität Darmstadt, Germany); Matthias Hollick (Technische Universität Darmstadt & Secure Mobile Networking Lab, Center for Advanced Security Research Darmstadt, Germany)

Adaptive Broadcast Suppression for Trickle-Based Protocols

Thomas Meyfroyt, Milosh Stolikj and Johan J. Lukkien (Eindhoven University of Technology, The Netherlands)

Joint Compressive Data Gathering and Scheduling in Wireless Sensor Networks under the Physical Interference Model

Dariush Ebrahimi and Chadi Assi (Concordia University, Canada)

SESSION 3B: Content-Centric Architectures for Multimedia (3:30 – 5:00pm)

Chair: Anand Seetharam, Room: CGS 527

Content-centric Routing in Wi-Fi Direct Multi-group Networks

Claudio E. Casetti, Carla-Fabiana Chiasserini and Luciano Curto Pelle (Politecnico di Torino, Italy); Carolina Del Valle (Instituto Tecnológico y de Estudios Superiores de Monterrey, Mexico); Yufeng Duan and Paolo Giaccone (Politecnico di Torino, Italy)

EdgeBuffer: Caching and Prefetching Content at the Edge in the MobilityFirst Future Internet Architecture

Feixiong Zhang (Rutgers University & WINLAB, USA); Chenren Xu (Carnegie Mellon University & School of Computer Science, USA); Yanyong Zhang (Rutgers University, USA); K. K. Ramakrishnan (University of California, Riverside, USA); Shreyasee Mukherjee (WINLAB, Rutgers University, USA); Roy Yates and Thu Nguyen (Rutgers University, USA)

TCCN: Tag-Assisted Content Centric Networking for Internet of Things

Yuning Song, Huadong Ma and Liang Liu (Beijing University of Posts and Telecommunications, P.R. China)

Work in Progress & Demo Session (5:00 – 6:30pm)

CGS Hallway

Tuesday June 16th

Keynote 2 (8:30 – 9:30am)

Room: CGS 129 (Jacob Sleeper Auditorium)

Coffee break (9:30 – 10:00am): 5th floor alcove

SESSION 4A: Dynamic Spectrum Access (10:00 – 11:30am)

Chair: Luca Bedogni, Room: CGS505

On 3-Dimensional Spectrum Sharing for TV White and Gray Space Networks

Luca Bedogni (University of Bologna & Department of Computer Science, Italy); Angelo Trotta and Marco Di Felice (University of Bologna, Italy)

More Flexible Radio Regulations: Investigating Random Spectrum Sampling Techniques for Temporal Occupancy Characterization

Sean Roche (The University of the West Indies, Trinidad and Tobago); Alexander M. Wyglinski (Worcester Polytechnic Institute, USA)

Floating Band D2D: Exploring and Exploiting the Potentials of Adaptive D2D-enabled Networks

Arash Asadi (IMDEA Networks Institute & University Carlos III of Madrid, Spain); Vincenzo Mancuso (IMDEA Networks Institute, Spain); Peter Jacko (Lancaster University, United Kingdom)

SESSION 4B: Internet of Things (10:00 – 11:30am)

Chair: Honggang Wang, Room: CGS 527

Scalability of Machine to Machine systems and the Internet of Things on LTE mobile networks

Jill Jermyn (Columbia University, USA); Roger Piqueras Jover, Ilona Murynets and Mikhail Istomin (AT&T Security Research Center, USA); Salvatore J. Stolfo (Columbia University, USA)

Ambient Control: A Mobile Framework for Dynamically Remixing the Internet of Things

Max Pagel and Darren Carlson (National University of Singapore, Singapore)

Prefix Coding of Hierarchical Categories for Publish-Subscribe in Mobile Wireless Environments

Bo Xu and Matei Stroila (HERE, USA)

Lunch (11:30am – 1:00pm)

West Campus Dining Hall: 275 Babcock Street, Boston, MA 02215

Panel: Security & Privacy in the Internet of Things (1:00 – 2:30pm)

Room: CGS 129 (Jacob Sleeper Auditorium)

SESSION 5A: Localization and Positioning (3:00 – 4:30pm)

Chair: Majid Ghaderi, Room: CGS 505

ReNLoc: An anchor-free localization algorithm for indirect ranging

Marios A Fanourakis (University of Geneva, Switzerland); Katarzyna Wac (University of Geneva & Quality of Life group, Switzerland)

Cooperation among Smartphones to Improve Indoor Position Information

Chen Qiu and Matt Mutka (Michigan State University, USA)

A Passive WiFi Source Localization System based on Fine-grained Power-based Trilateration

Zan Li and Torsten Ingo Braun (University of Bern, Switzerland); Desislava Dimitrova (ETH Zurich, Switzerland)

SESSION 5B: Security and Privacy Issues (3:00 – 4:30pm)

Chair: Pericle Perazzo, Room: CGS 527

Privacy-preserving Routing in Delay Tolerant Networks based on Bloom Filters

Evangelos Papapetrou and Vasileios Bourgos (University of Ioannina, Greece); Artemios G. Voyiatzis (SBA Research, Austria)

In the shadows we trust: A secure aggregation tolerant watermark for data streams

Arezou Soltani Panah, Ron van Schyndel and Timos Sellis (RMIT University, Australia); Elisa Bertino (Purdue University, USA)

The Verifier Bee: a Path Planner for Drone-Based Secure Location Verification

Pericle Perazzo (University of Pisa, Italy); Kanishka Ariyapala (University of Florence, Italy); Mauro Conti (University of Padua, Italy); Gianluca Dini (University of Pisa, Italy)

Coffee break (4:30 – 5:00pm): 5th floor alcove

SESSION 6: Ph.D. Forum (5:00 – 6:30pm)

Room: CGS 129 (Jacob Sleeper Auditorium)

Comparing Alternative Approaches for Mobile Content Delivery in Information-Centric Networking

Feixiong Zhang (Rutgers University & WINLAB, USA)

A Cell Biology Inspired Data Packet Forwarding Scheme in Mobile Ad-hoc Networks

Sulochana Sooriyaarachchi (University of Moratuwa, Sri Lanka)

Towards an Evolvable Cellular Architecture

Jill Jermyn (Columbia University, USA)

Design of a lightweight Control Plane for supporting MAC and Routing in industrial WSNs

Dario Fanucchi (University Augsburg, Germany)

An Analytic Evaluation of the Trickle Algorithm: Towards Efficient, Fair, Fast and Reliable Data Dissemination

Thomas Meyfroyt (Eindhoven University of Technology, The Netherlands)

Dinner Banquet (7:00 – 9:30pm)

Trustee Ballroom & Lounge: 1 Silber Way, 9th Floor, Boston, MA 02215

Wednesday June 17th

SESSION 7A: Network Analysis and Diagnosis (8:30 – 10:00am)

Chair: Krishna Kant, Room: CGS 505

NetTomo: A Tomographic Approach towards Network Diagnosis

Paritosh Ramanan, Goutham Kamath and Wen-Zhan Song (Georgia State University, USA)

WiFo: A Diagnostic Tool for IEEE 802.11 MAC

Hessan Fegghi (Hamilton Institute, National University of Ireland Maynooth, Ireland); David Malone (Maynooth University, Ireland)

On the Map Accuracy required for Network Simulations based on Ray Launching

Thomas Hänel, Matthias Schwamborn, Alexander Bothe and Nils Aschenbruck (University of Osnabrück, Germany)

SESSION 7B: Opportunistic Networks and Prediction Mechanisms (8:30 – 10:00am)

Chair: Francesca Cuomo, Room: CGS 527

Social Cognitive Heuristics for Adaptive Data Dissemination in Opportunistic Networks

Matteo Mordacchini (IIT, CNR, Pisa, Italy); Andrea Passarella and Marco Conti (IIT-CNR, Italy)

HiPCV: A History Based Learning Model for Predicting Contact Volume in Opportunistic Networks

Mehrab Shahriar (University of Texas at Arlington, USA); Yonghe Liu (The University of Texas at Arlington, USA); Sajal K. Das (Missouri University of Science and Technology, USA)

Mobile Network Resource Optimization under Imperfect Prediction

Nicola Bui and Joerg Widmer (IMDEA Networks Institute, Spain)

Coffee break (10:00 – 10:30am): The 5th floor alcove

SESSION 8A: Resource management and QoS/QoE provisioning (10:30am – 12:00pm)

Chair: Turgay Korkmaz, Room: CGS 505

Analysis of MAC-level Throughput in LTE Systems with Link Rate Adaptation and HARQ Protocols

Raffaele Bruno, Antonino Masaracchia and Andrea Passarella (IIT-CNR, Italy); Stefano Mangione (Università di Palermo, Italy)

Service Differentiation for Improved Cell Capacity in LTE Networks

Mattia Carpin and Andrea Zanella (University of Padova, Italy); Kashif Mahmood (Telenor, Norway); Jawad Rasool (Telenor ASA, Norway); Ole Grøndalen (Telenor, Norway); Olav Norvald Østerbø (Telenor Corporate Development, Norway)

Sharing low-cost wireless infrastructures with telecommunications operators for backhauling 3G services in deprived rural areas

Francisco Javier Simó Reigadas (Universidad Rey Juan Carlos, Spain); Esteban Municio and Eduardo Morgado (Rey Juan Carlos University, Spain); Eva M. Castro and Andrés Martínez (Universidad Rey Juan Carlos, Spain)

SESSION 8B: Topology-Aware Networking (10:30am – 12:00pm)

Chair: Thrasyvoulos Spyropoulos, Room: CGS 527

Navigo: Interest Forwarding by Geolocations in Vehicular Named Data Networking

Giulio Grassi (University Pierre et Marie Curie, France); Davide Pesavento (Université Pierre et Marie Curie, France); Giovanni Pau (UPMC Sorbonne Universités & UCLA, France); Lixia Zhang (University of California at Los Angeles, USA); Serge Fdida (UPMC Sorbonne Universités, France)

Lightweight Clustering of Spatio-Temporal Data in Resource Constrained Mobile Sensing

Ghulam Murtaza (University of New South Wales & Network Research Lab, Australia); Andreas Reinhardt (TU Clausthal, Germany); Salil S Kanhere (The University of New South Wales, Australia); Sanjay Jha (University of NSW, Australia)

Coop-DMAC: A Cooperative Directional MAC Protocol for Wireless Networks

Peng Wang, Marina Petrova and Petri Mähönen (RWTH Aachen University, Germany)

Lunch (12:00am – 1:30pm)

West Campus Dining Hall: 275 Babcock Street, Boston, MA 02215

SESSION 9A: Modeling, Measurements and Performance Analysis (1:30 – 3:00pm)

Chair: Joerg Widmer, Room: CGS 505

Real-Time Internet Traffic Classification using Deep Learning

Vikas Verma (ERICSSON RESEARCH INDIA, India)

Impact of Country-scale Internet Disconnection on Structured and Social P2P Overlays

Ding Ding and Mauro Conti (University of Padua, Italy); Renato Figueiredo (University of FLorida, USA)

Smartphone users' mobile network's quality provision and VoLTE intend: Six-months field study

Katarzyna Wac (University of Geneva & Quality of Life group, Switzerland); Gerardo Pinar, Mattia Gustarini and Jerome Marchanoff (University of Geneva, Switzerland)

SESSION 9B: Video Broadcast & Distribution (1:30 – 3:00pm)

Chair: Bo Sheng, Room: CGS 527

Reliable Videos Broadcast with Network Coding and Coordinated Multiple Access Points

Pouya Ostovari (Temple University & Computer and Information Sciences, USA); Jie Wu (Temple University, USA)

U-TV: User-centric Scalable DTV broadcast over Heterogeneous Wireless Networks

Chetna Singhal and Swades De (Indian Institute of Technology Delhi, India); Hari Gupta (Indian Institute of Technology, Delhi, India)

Work-In-Progress Papers

Multi-level Sample Importance Ranking based Progressive Transmission Strategy for Time Series Body Sensor Data

Ming Li (California State University, USA); Yu Cao (The University of Massachusetts Lowell, USA); Balakrishnan Prabhakaran (University of Texas at Dallas, USA)

An Analysis of Opportunistic Forwarding for Correlated Wireless Channels

Anand Seetharam (California State University Monterey Bay, USA); Jim Kurose (University of Massachusetts at Amherst, USA)

Impact of Network Monitoring in IEEE 802.15.4e-based Wireless Sensor Networks

Dario Fanucchi (University Augsburg, Germany); Barbara Staehle (Fraunhofer ESK, Germany); Rudi Knorr (Fraunhofer Institute for Embedded Systems and Communication Technologies (ESK), Germany)

Magemite: Character Inputting System Based on Magnetic Sensor

Yuyang Ke, Yan Xiong, Yiqing Hu, Xudong Gong and Wenchao Huang (University of Science and Technology of China, P.R. China)

Towards an Incentive-aware Cross Layer Simulation Model for Multihop Video Dissemination

Matthias Wichtlhuber (Technische Universität Darmstadt, Germany); Mahdi Mousavi, Hussein Al-Shatri, Anja Klein and David Hausheer (TU Darmstadt, Germany)

An Integrated Simulation Environment for Wireless Sensor Networks

Mariosorio Prist, Andrea Moneriù and Sauro Longhi (Università Politecnica delle Marche, Italy); Federico Giuglioloni (Università di Bologna, Italy); Alessandro Freddi (Università Politecnica delle Marche, Italy)

Autonomous Mobile Agent based Intrusion Detection Framework in Wireless Body Area Networks

Geethapriya Thamilarasu and Zhiyuan Ma (University of Washington Bothell, USA)

Demos

Transition-enabled Event Dissemination for Pervasive Mobile Multiplayer Games

Björn Richerzhagen, Marc Schiller, Max Lehn, Denis Lapiner and Ralf Steinmetz (Technische Universität Darmstadt, Germany)

A Demonstration for Content Delivery on Wi-Fi Direct Enabled Devices

Claudio E. Casetti, Carla-Fabiana Chiasserini and Luciano Curto Pelle (Politecnico di Torino, Italy); Carolina Del Valle (Instituto Tecnológico y de Estudios Superiores de Monterrey, Mexico); Yufeng Duan and Paolo Giaccone (Politecnico di Torino, Italy)

WARPsim: A Code-Transparent Network Simulator for WARP Devices

Andreas Schumacher, Martin Serror and Christian Dombrowski (RWTH Aachen University, Germany); James Gross (Royal Institute of Technology (KTH), Sweden)

A Software Tool for Coverage Planning through Different Applications of Optimal Spatial Interpolation

Nikos Perpinias, Alexandros Palaios, Janne Riihijärvi and Petri Mähönen (RWTH Aachen University, Germany)

APP and PHY in Harmony: Demonstrating Scalable Video Streaming Supported by Flexible Physical Layer Control

Denny Stohr and Matthias Schulz (Technische Universität Darmstadt, Germany); Matthias Hollick (Technische Universität Darmstadt & Secure Mobile Networking Lab, Center for Advanced Security Research Darmstadt, Germany); Wolfgang Effelsberg (University of Mannheim, Germany)

Anticipatory Quality Adaptation for Mobile Video Streaming: Reaching Perfect Fluency by Channel Prediction

Stefan Valentin (Huawei Technologies, France); Sami Mekki (France Research Center, Huawei Technologies, France)

WoWMoM 2015 Workshop Program
Sunday June 14th

1. Internet of Things- Smart Objects and Services (IoT-SoS) : CGS 421
2. Autonomic and Opportunistic Communications (AOC) : CGS 423
3. Smart Vehicles (SmartVehicles) : CGS 521
4. Video Everywhere (VidEv) : CGS 523
5. COgnitive Radio Applications and aLgorithms (CORAL) : CGS 527

Workshop Program (IoT-SoS 2015)
Room: CGS 421

8:30 – 9:00: Registration

9:00 – 9:05: Opening Remarks (Nilanjan Banerjee and Salvatore Distefano)

9:05 – 10:00: *Keynote: “Sonar Inside Your Body: Toward Implantable Sensor Networks”*
Dr. Tommaso Melodia,
Department of Electrical and Computer Engineering
Northeastern University.

10:00 – 10:30: Coffee Break

10:30 – 12:00: Session 1. IoT Applications. (*Chair: Dr. Nilanjan Banerjee*)

[1] A Rational Mechanism for Coordinating Crowdsourced Resources for Geo-temporal Request Satisfaction, *Christine Bassem and Azer Bestavros (Boston University, USA)*

[2] Experiments with Security and Privacy in IoT Networks, *Mary R Schurgot and David Shinberg (LGS Innovations, USA); Lloyd Greenwald (LGS Innovations / Bell Labs, USA)*

[3] PhyNetLab: Architecture Design of Ultra-Low Power Wireless Sensor Network Testbed, *Aswin Karthik Ramachandran Venkatapathy, Moritz Roidl, Jan Emmerich and Andreas Riesner (TU Dortmund University, Germany); Michael ten Hompel (TU Dortmund, University of Technology & Fraunhofer-Institut Materialflow and Logistics, Germany)*

[4] Cost-efficient universal Approach for Remote Meter Reading Using Web Services and Computer Vision, *Henning Puttnies, Vlado Altmann, Frank Golatowski and Dirk Timmermann (University of Rostock, Germany)*

12:00 – 1:30: Lunch Break

1:30 – 2:45: Session 2. Wireless Systems. (*Chair: Dr. Mary R. Schurgot*)

[1] An IEEE 802.11ah Programmable Modem, *Raul Casas, Vakis Papaparaskeva and Xuehong Mao (Cadence Design Systems, USA); Rishi Kumar and Piyush Kaul (Cadence Design Systems, India); Samer Hijazi (Cadence Design Systems, USA)*

[2] Performance Analysis of IoT-Enabling IEEE 802.11ah Technology and its RAW Mechanism with Non-Cross Slot Boundary Holding Schemes, *Muhammad Qutab-ud-din and Ali Hazmi (Tampere University of Technology, Finland); Behnam Badihi, Anna Larmo and Johan Torsner (Ericsson Research, Finland); Mikko Valkama (Tampere University of Technology, Finland)*

[3] Highly Scalable Fair Contention Resolution Scheme Based on Idle Time, *Byung-Jae Kwak (Electronics and Telecommunications Research Institute, Korea); Junhyuk Kim (KAIST, Korea); Nah-Oak Song (Korea Advanced Institute of Science and Technology (KAIST), Korea); Kyoungnye Kim and June-Koo Kevin Rhee (KAIST, Korea); Kapseok Chang (ETRI, Korea); Moon-Sik Lee (Electronics and Telecommunications Research Institute & Stanford University, Korea)*

2:45 – 2:50: Closing Remarks

3:00: End of Workshop

Workshop Program (AoC 2015)
Room: CGS 423

8:30 – 9:00: Registration

9:00 – 9:05: Opening Remarks

9:05 – 10:00: *Keynote: "Opportunistic Offloading on the Edge"*
Thrasyvoulos Spyropoulos (EURECOM, France)

10:00 – 10:30: Coffee Break

10:30 – 12:00: Session 1: Modeling (*Chair: Dr. Matteo Mordacchini*)

[1] Characterizing Opportunistic Communication with Churn for Crowd-counting, *Ljubica Pajevic (KTH, Royal Institute of Technology, Sweden); Gunnar Karlsson (KTH Royal Institute of Technology, Sweden)*

[2] A Markov chain model for drop ratio on one-packet buffers DTNs, *Victor Ramiro (University of Toulouse & ISAE, France); Dinh Khanh Dang (University of Toulouse - ISAE, France); Gwilherm Baudic (ISAE - Université de Toulouse, France); Tanguy Perennou and Emmanuel Lochin (University of Toulouse - ISAE, France)*

[3] Inferring Content-Centric Traffic for Opportunistic Networking from Geo-location Social Networks, *Pavlos Sermpezis and Thrasyvoulos Spyropoulos (EURECOM, France)*

12:00 – 1:30: Lunch Break

1:30 – 2:20: Session 2 - Opportunistic computation (*Chair: Dr. Matteo Mordacchini*)

[1] Computational Ferrying: Challenges in Deploying a Mobile High Performance Computer, *Alireza Monfared, Mostafa Ammar and Ellen Zegura (Georgia Institute of Technology, USA); David Doria and David Bruno (United States Army Research Laboratory, USA)*

[2] The design of a generalised approach to the programming of systems of systems, *Geoff Coulson, Gordon Blair, Yehia Elkhatib and Andreas U. Mauthe (Lancaster University, United Kingdom)*

2:20 – 3:10: Session 3 - Information processing (*Chair: Dr. Matteo Mordacchini*)

[1] Inter-Session Network Coding in Delay Tolerant Mobile Social Networks: an Empirical Study, *Neetya Shrestha and Lucile Sassatelli (I3S - Université Nice Sophia Antipolis/CNRS UMR 7271, France)*

[2] Socially-Aware Content Retrieval using Random Walks in Disruption Tolerant Networks, *Tuan Le and Haik Kalantarian (University of California, Los Angeles, USA); Mario Gerla (University of California at Los Angeles, USA)*

3:10: End of Workshop

Workshop Program (SmartVehicles 2015)
Room: CGS 521

8:30 – 8:50: Registration

8:50 – 9:00: Opening Remarks

9:00 – 10:00: *Keynote: "Beyond Position: Scaling Challenges in Future Vehicular Networks"*
Marco Gruteser, Rutgers University, USA

10:00 – 10:30: Coffee Break

10:30 – 11:45: Session 1: Communications & Data Dissemination (*Chair: Dr. Jérôme Härrri*)

[1] Performance Evaluation of a Mixed Vehicular Network with CAM-DCC and LIMERIC Vehicles, *Bin Cheng and Ali Rostami (Rutgers University, WINLAB, USA); Marco Gruteser (WINLAB / Rutgers University, USA); John Kenney and Gaurav Bansal (Toyota InfoTechnology Center, USA); Katrin Sjoberg (Volvo, Sweden)*

[2] Taxi-Cab Cloud Architecture to Offload Data Traffic from Cellular Networks, *Kenneth U Ezirim (Graduate Center, City University of New York, USA); Shweta Jain (York College CUNY & Graduate Center of CUNY, USA)*

[3] Throughput Analysis of IEEE 802.11p-based Multi-Hop V2I Communications, *Ribal Atallah (Concordia University, Canada); Maurice J. Khabbaz (Notre-Dame University, Lebanon); Chadi Assi (Concordia University, Canada)*

12:00 – 1:30: Lunch Break

1:30 – 2:20: Session 2 - Traffic Estimation (*Chair: Dr. Raffaele Bruno*)

[1] Opportunistic Calibration of Smartphone Orientation in a Vehicle, *Bahador Khaleghi (Intelligent Mechatronic Systems (IMS), Canada); Akrem Saad El-ghazal and Allaa R. Hilal (University of Waterloo, Canada); Jason Toonstra and Ben Miners (Intelligent Mechatronic Systems (IMS), Canada); Otman Basir (University of Waterloo, Canada)*

[2] V2X Data Dissemination Delay for Vehicular Traffic Density Estimations, *Sosina Gashaw and Jérôme Härrri (EURECOM, France)*

2:20 – 3:10: Session 3 – ITS Applications (*Chair: Dr. Salil Kanhere*)

[1] Min-Max Fair Car-Parking Slot Assignment, *Elisabetta Alfonsetti (KTH, USA); Pradeep Chathuranga Weeraddana (KTH, Stockholm, Sweden); Carlo Fischione (KTH, Sweden)*

[2] A Fail Safe Broadcast Protocol for Collaborative Intelligent Vehicles, *Yitian Gu, Shou-pon Lin and Nick Maxemchuk (Columbia University, USA)*

3:10: End of Workshop

Workshop Program (VidEv 2015)
Room: CGS 523

8:30 – 9:00: Registration

9:00 – 10:00: *Keynote: “Video everywhere will require dense networking”*
Thomas DC Little (Boston University, USA)

10:00 – 10:30: Coffee Break

10:30 – 12:00: Session 1 (*Chair: Yousof Naderi*)

[1] An Adaptation Mechanism for Robust OTT Video Transmission, *Fakher Oueslati and Jean-Charles Grégoire*
(*University of Quebec, INRS*)

[2] Multi-Source Mobile Video Streaming with Proactive Caching and D2D Communication, *Vasilios A. Siris and Dimitrios Dimopoulos* (*Athens University of Economics and Business*)

[3] LiTMaS: Live Road Traffic Maps for Smartphones, *S. M. Iftekharul Alam, Sonia Fahmy and Yung-Hsiang Lu*
(*Purdue University*)

12:00 – 1:30: Lunch Break

1:30 – 2:30: Session 2 (*Chair: Yousof Naderi*)

[1] Streaming 4K/UHD Video to the Rest of Us: Can Bandwidth Sharing Help?, *Isabel Montes, Jaymari Chua, Joseph Michelangelo Cruz, Augusto Remillano, II, Joseph Darwin Young, Roel Ocampo and Cedric Angelo Festin*
(*University of the Philippines*)

[2] HEVC Decoder Optimization in Low Power Configurable Architecture for Wireless Devices, *Vasileios Magoulianitis and Ioannis Katsavounidis* (*University of Thessaly*)

2:30: End of Workshop

Workshop Program (CORAL 2015)
Room: CGS 527

8:30 – 9:00: Registration

9:00 – 9:15: Introduction from the Workshop Chairs

9:15 – 10:00: *Keynote Presentation:* Alexander M. Wyglinski (Worcester Polytechnic Institute, USA)

10:00 – 10:30: Coffee Break

10:30 – 12:00: Session 1 - Sensing I (*Chair: Dr. Yue (Frank) Gao*)

[1] An Experimental Study on the Statistical Properties of Radio Environment Noise
Alexandros Palaios, Hauke Dose, Janne Riihijärvi and Petri Mähönen (RWTH Aachen University, Germany)

[2] A Multi-Channel Spectrum Sensing Scheme with Filter Bank Realization for LTE Signals
Trung Thanh Nguyen (Faculty of Engineering, The University of Duisburg-Essen, Germany); Hanwen Cao (Huawei European Research Center, Germany); Theo Kreul (University of Duisburg-Essen, Germany); Thomas Kaiser (Universität Duisburg-Essen, Germany)

[3] Spectrum Sensing based on Maximum Eigenvalue Approximation in Cognitive Radio Networks
Adeel Ahmed, Yim-Fun Hu, Jim M. Noras and Prashant Pillai (University of Bradford, United Kingdom)

12:00 – 1:30: Lunch Break

1:30 – 3:00: Session 2 – Sensing II (*Chair: Dr. Antonio G. Marques*)

[1] Sub-Nyquist Rate Wideband Spectrum Sensing over TV white space for M2M Communications
Yuan Ma, Yue Gao and Clive Parini (Queen Mary University of London, United Kingdom)

[2] A Weighted Diversity Combining Technique for Cyclostationarity Detection Based Spectrum Sensing in Cognitive Radio Networks
Daiki Cho and Shusuke Narieda (National Institute of Technology, Akashi College, Japan)

[3] Unified Approach for Performance Analysis of Cognitive Radio Spectrum Sensing over Correlated Multipath Fading Channels
Salam Al-Juboori and Xavier N Fernando (Ryerson University, Canada)

3:00 – 3:30: Coffee Break

3:30 – 5:30: Session 3 – Spectrum Access (*Chair: Dr. Luca Bedogni*)

[1] Rendezvous in cognitive radio ad-hoc networks with asymmetric channel view
Akbar Hossain and Nurul I Sarkar (Auckland University of Technology, New Zealand)

[2] Fusion Based Spectrum Decision Framework for Cognitive Radio Users
Ahmad Naem Akhtar (National University of Science and Technology (NUST), College of Telecommunication Engineering, Islamabad, Pakistan)

[3] Feasibility Study on Application of Impulse-UWB for Control Channel in Cognitive Radio Networks
Michael Doering, Anatolij Zubow and Adam Wolisz (Technische Universität Berlin, Germany)

[4] Underlay Multi-Hop Cognitive Networks with Orthogonal Access
Antonio G. Marques (Universidad Rey Juan Carlos, Spain); Sergio Molinero (King Juan Carlos University, Spain); Georgios B. Giannakis (University of Minnesota, USA)

5:30: End of Workshop