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Technical Sessions

June 13th, 2018

09:00-09:30 **Welcome and Introduction**

09:30-10:30 **Keynote 1 -** **Chair: Salil Kanhere**
Dependable Internet of Things — **Kay Roemer, TU Graz**

10:30-11:00 Coffee Break

11:00-12:30 **Session 1A: Network Virtualization**
Chair: George Polyzos

[1] Realizing Wireless Communication through Software-defined HyperSurface Environments 1
Christos Liaskos, Shuai Nie, Ageliki Tsioliaridou, Andreas Pitsillides, Sotiris Ioannidis, and Ian Akyildiz;

[2] A^2VF : Adaptive Allocation for Virtual Network Functions in Wireless Access Networks 11
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[3] MANET-oriented SDN: Motivations, Challenges, and a Solution Prototype 20
Paolo Bellavista, Alessandro Dolci, and Carlo Giannelli;

[4] Optimization-in-the-Loop for Energy-Efficient 5G 29
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[2] Performance Analysis of a Device-to-Device Offloading Scheme for Vehicular Networks 47
Loreto Pescosolido, Marco Conti, and Andrea Passarella;

[3] Efficient Uplink from Vehicular Micro Cloud Solutions to Data Centers 56
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[4] Infrastructure-Assisted Communication for NDN-VANETs 63
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12:30-14:00 Lunch Break

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14:00-15:30 **Session 2A: Device-to-Device and Multimedia**
  Chair: Symeon Papavassiliou

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[2] Infrastructureless Pervasive Information Sharing with COTS Devices and Software 82
Noelia Perez Palma, Vincenzo Mancuso, and Marco Ajmone Marsan;

[3] A Detection Mechanism for Internal Attacks on Pull-based P2P Streaming Systems 89
Hatem Ismail, Stefanie Roos, and Neeraj Suri;

[4] QoE Degradation Attack in Dynamic Adaptive Streaming over ICN 96
Mauro Conti, Ralph Droms, Muhammad Hassan, and Sebastiano Valle;

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  Chair: Stefanos Papadakis

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[2] Mm-wave Initial Access: A Context Information Overview 114
Francesco Devoti, Ilario Filippini, and Antonio Capone;

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[4] Medium Access and Transport Protocol Aspects in Practical 802.11ad Networks 132
Hany Assasa, Swetank Kumar Saha, Adrian Loch, Dimitrios Koutsonikolas, and Joerg Widmer;

15:30-16:00 Coffee Break

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  Chair: Vasilios Siris

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[2] Relevance-Aware Information Dissemination in Vehicular Networks 147
Tobias Meuser, Björn Richerzhagen, Ioannis Stavrakakis, The An Binh Nguyen, and Ralf Steinmetz;

[3] Weighting Past on the Geo-aware State Deployment Problem 150
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[4] The Impact of Social-Network Diffusion on Wireless Edge Resource Allocation 153
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17:00-19:00 Welcome Reception

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    Khaled Q. Abdelfadeel, Victor Cionca, and Dirk Pesch;

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10:30-11:00 Coffee Break

11:00-12:30 **Panel 1**

12:30-14:00 Lunch Break

14:00-15:00 **Keynote 2 - Chair: Vasilios Siris**
             Network slicing: Enabling Customization in 5G Mobile Networks - **Albert Banchs**

15:00-15:30 Coffee Break

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[1] IEEE 802.11ah Restricted Access Window Surrogate Model for Real-Time Station Grouping 300
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[2] When Analog Meets Digital: Source-Encoded Physical-Layer Network Coding 309
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[3] Enabling Runtime Adaptation of Physical Layer Settings for Dependable UWB Communications 318
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20:30-23:30 **Gala Dinner**

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Chair: Konstantinos Oikonomou

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Ning Wang, and Jie Wu;

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Chair: Andrea Passarella

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Argyrios G. Tasiopoulos, Onur Ascigil, Ioannis Psaras, and George Pavlou;

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Chrysa Papadaki, Teemu Kärkkäinen, and Jörg Ott;

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Theodoros Giannakas, Pavlos Sermpezis, and Thrasyvoulos Spyropoulos;

[4] Forecasting mobile service demands for anticipatory MEC 410
Stavros Ntalampiras, and Marco Fiore;

12:30-14:00 N2 Women Meeting & Panel Discussion

Panellists
Dr. Suzan Bayhan, Senior Researcher, TKN, TU Berlin, Germany
Dr. Eirini Eleni Tsiropoulou, Assistant Professor, University of New Mexico
Dr. Marilia Curado, Assistant Professor, University of Coimbra, Portugal
Dr. Maria Papadopouli, Associate Professor, University of Crete, Greece

Organizer: Georgia Koutsandria, Ph.D Student, Sapienza University of Rome, Italy
Mentor: Dr. Maria Papadopouli, University of Crete, Greece

N2 Women is supported by ACM SIGMOBILE, ACM SIGCOMM, IEEE Communications Society, IEEE Computer Society (CS) Technical Committee on Computer Communications (TCCC), NSF Division of Computer and Network Systems, CRA-W, Microsoft Research, HP Labs, and Google Research. For more information about N2 Women, visit: http://n2women.comsoc.org

IEEE IoT-SoS 2018

Workshop Program

June 12th, 2018

09:00-09:10 **Opening Remarks**

09:10-10:30 **Keynote**

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[2] A Microservices Architecture for Reactive and Proactive Fault Tolerance in IoT Systems 423
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[3] A Routing Protocol for LoRA Mesh Networks 429
Daniel Lundell, Anders Hedberg, Christian Nyberg, and Emma Fitzgerald;

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[6] The road to privacy in IoT: beyond encryption and signatures, towards unobservable communication 447
Ralf C. Staudemeyer, Henrich C. Pöhls, and Marcin Wójcik;

[7] A Modular Tool for Benchmarking IoT Publish-Subscribe Middleware 454
L. Zilhão, Ricardo Morla, and Ana Aguiar;

[8] Smart IoT Data Collection 460
Nikos Fotiou, Vasilios A. Siris, Alexandros Mertzianis, and George C. Polyzos

15:30-16:00 Coffee Break

16:00-17:00 **Panel**
IoT security - threats and solutions

17:00-17:10 **Closing Remarks**

Workshop Program

June 12th, 2018

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09:00-09:10 **Opening Remarks**

09:05-10:00 **Keynote Talk**
Traffic management in the era of vehicle automation and communication systems (VACS) - Markos Papageorgiou

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[2] Environment-Aware Communications for Cooperative Collision Avoidance Applications 478
Guillaume Jornod, Roman Alieiev, Andreas Kwoczek, and Thomas Kürner

[3] Securing Road Traffic Congestion Detection by Incorporating V2I Communications 485
Vinh Thong Ta, Amit Dvir, and Yalin Arie

12:05-12:50 **Platforms for Connected Cars**

[4] V2X communications for infrastructure-assisted automated driving 491
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[5] IoT and Microservices Based Testbed for Connected Car Services 497
Soumya Kanti Datta, Mohammad Irfan Khan, Lara Codeca, B. Denis, Jérôme Härri, and Christian Bonnet;

12:55-13:00 **Closing**

10:30-11:00 Lunch

Workshop Program

June 12th, 2018

09:00-09:10 **Opening Remarks**

09:10-10:30 **Session I:**

10:30-11:00 Coffee break

11:00-12:20 **Session II:**

12:20-12:30 **Workshop conclusions**

12:30-14:00 Lunch