**DCOSS 2019 Program**

**Wednesday, May 29**

**09.00-09.30:** **Opening** (General Chair, Program Chairs)

**09.30-10.30:** **Keynote Talk**

*Luca Mottola, Politecnico di Milano, Italy*

**10.30-11.00:** **Coffee Break**

**11.00-13.00: Session I: Ranging and Localization**

R3: Reflection Resilient Concurrent Ranging with Ultra-Wideband Radios

*Milad Heydariaan, Hessam Mohammadmoradi, Omprakash Gnawali (University of Houston, USA)*

SRAC: Simultaneous Ranging and Communication in UWB Networks

*Hessam Mohammadmoradi, Milad Heydariaan, Omprakash Gnawali (University of Houston, USA)*

Thermal Piloting: A Novel Approach for Sensor Localization in Data Center Monitoring

*Mehdi Jafarizadeh, Peiying Jennifer Tsai, Rong Zheng (McMaster University, Canada)*

Map-aided Navigation for Emergency Searches

*Johan Wahlstrom, Pedro Porto Buarque de Gusmao, Andrew Markham, Niki Trigoni (University of Oxford, UK)*

**13.00-14.00: Lunch**

**14.00-15.30: Session II: Best Paper Award Nominees**

mID: Tracking and Identifying People with Millimeter Wave Radar

*Peijun Zhao, Chris Xiaoxuan Lu (University of Oxford); Jianan Wang (DeepMind); Changhao Chen, Wei Wang, Niki Trigoni, Andrew Markham (University of Oxford, UK)*

ZenCam: Context-Driven Control of Autonomous Body Cameras

*Shiwei Fang, Ketan Mayer-Patel, Shahriar Nirjon (UNC Chapel Hill, USA)*

Energy-Efficient Radio Selection and Data Partitioning for Real-Time Data Transfer

*Di Mu, Mo Sha, Kyoung-Don Kang, Hyungdae Yi (State University of New York at Binghamton, USA)*

**15.30-15.45: Invited Poster Papers (I)**

Aerial Robotic Team for Complex Monitoring in Precision Agriculture

*Emilian Vlasceanu, Dan Popescu, Loretta Ichim (University Politecnica of Bucharest, Romania)*

An Efficient Trajectory-based Routing using Virtual Coordinates for Low-Power WSNs with Mobile Sinks

*Xiaofei Cao, Sanjay Madria (Missouri University of Science and Technology, USA)*

Expressive Feature-oriented Multicast for the Internet of Things

*Jonathan Oostvogels, Stefanos Peros, Stephane Delbruel, Danny Hughes (KU Leuven, Belgium)*

**Welcome Reception**

**Thursday, May 30**

**09.30-10.30: Keynote Talk**

*Magnus Halldorsson, Reykjavik University, Iceland*

**10.30-11.00: Coffee Break**

**11.00-13.00: Session III: Internet of Things: Gateways, Policies, and Novel Platforms**

Handling inherent delays in Virtual IoT Gateway

*Saptarshi Hazra, Simon Duquennoy (RISE SICS, Sweden); Peng Wang (KTH Royal Institute of Technology, Sweden); Thiemo Voigt (RISE SICS, Sweden); Chenguang Lu, Daniel Cederholm (Ericsson Research, Sweden)*

Securing the Insecure Link of Internet-of-Things Using Next-Generation Smart Gateways

*Syed Rafiul Hussain, Elisa Bertino (Purdue University); Shahriar Nirjon (University of North Carolina Chapel Hill, USA)*

CLAP: Compact Labeling scheme for Attribute-based IoT Policy Control

*Mostafa Uddin, Murali Kodialam, Fang Hao, Sarit Mukherjee (Nokia Bell Labs, USA)*

Designing a Low-Cost IoT Sensing Platform for VOC Material Classification

*Jungmo Ahn, Hyungi Kim, Eunha Kim, JeongGil Ko (Ajou University, Korea)*

**13.00-14.00: Lunch Break**

**14.00-15.30: Session IV: Applications**

Shape Estimation Using Location-Unknown Distance Sensors: A Curvature Based Approach

*Hiroki Ikeuchi (NTT Corporation, Japan); Hiroshi Saito (The University of Tokyo, Japan)*

A Real-Time Audio Monitoring Framework with Limited Data for Constrained Devices

*Asif Salekin (University of Virginia, USA); Shabnam Ghaffarzadegan, Zhe Feng (Bosch Research and Technology Center, USA); John A. Stankovic (University of Virginia, USA)*

PotatoScanner – A Mobile Delay Tolerant Wireless Sensor Node for Smart Farming Applications

*Björn Gernert, Jan Schlichter, Lars Wolf (TU Braunschweig, Germany)*

**15.30-15.45: Invited Poster Papers (II)**

Utilizing Mobile Nodes for Congestion Control in Wireless Sensor Networks  
*Antonia Nicolaou, Natalie Temene, Charalampos Sergiou, Chryssis Georgiou, Vasos Vassiliou (University of Cyprus, Cyprus)*   
  
A Configurable Distributed Data Analytics Infrastructure for the Industrial Internet of Things  
*Nikos Kefalakis, Aikaterini Roukounaki, John Soldatos (Athens Information Technology, Greece)*   
  
Cognitive Game for OCD Effects Minimization using IoT  
*Evangelos D. Spyrou, Dimitris Mitrakos (Aristotle University of Thessaloniki, Greece)*

**Conference Dinner**

**Friday, May 31**

**09.00-10.30: Session V: System Services**

Active Replication for Centrally Coordinated Teams of Autonomous Vehicles

*Nasos Grigoropoulos, Manos Koutsoubelias, Spyros Lalis (University of Thessaly, Greece)*

DeepRisk: A Deep Transfer Learning Approach to Migratable Traffic Risk Estimation in Intelligent Transportation using Social Sensing

*Yang Zhang, Hongxiao Wang, Daniel Zhang, Dong Wang (University of Notre Dame, USA)*

Power efficient algorithms for wireless charging under phase shift in the vector model

*Ioannis Katsidimas, Sotiris Nikoletseas, Christoforos Raptopoulos (University of Patras, Greece)*

**10.30-11.00: Coffee Break**

**11.00-12.30: Session VI: Communication**

Random Gossip Processes in Smartphone Peer-to-Peer Networks

*Calvin Newport, Alex Weaver (Georgetown University, USA)*

A Model for Reliable Uplink Transmissions in LoRaWAN

*Furqan Khan (The University of Queensland, Australia); Raja Jurdak (CSIRO ICT Centre, Australia); Marius Portmann (The University of Queensland, Australia)*

Continuous Monitoring meets Synchronous Transmissions and In-Network Aggregation

*Charalampos Stylianopoulos, Magnus Almgren, Olaf Landsiedel, Marina Papatriantafilou (Chalmers University of Technology, Sweden)*

**12.30-12.50: Posters/Demos**

Enhancing Distributed Sensor Networks for Air-Quality Monitoring: A Social Informatics Approach  
*L. G. Pee (Nanyang Technological University, Singapore)*   
  
A hybridization of Mobile Crowdsensing, Twitter Analytics, and Sensor Data for the holistic approach of pollen onsets detection  
*Pantelis Tzamalis (University of Patras & CTI, Greece), Pantelis Vikatos (University of Patras, Greece), Sotiris Nikoletseas (University of Patras & CTI, Greece)*   
  
Security on the Farm: Safely Communicating with Legacy Agricultural Instrumentation  
*Tim Bell (BECS Technology, Inc., USA), Roger Chamberlain (Washington University in St.Louis, USA), Mike Chambers (BECS Technology, Inc., USA), Brian Riek (AGCO Corporation, USA), Todd Steinbrueck (BECS Technology, Inc., USA)*   
  
Traffic Density Based Distributed Congestion Control Strategy for Vehicular Communication  
*Oluwaseyi Akinlade, Ikjot Saini, Xiaofeng Liu, Arunita Jaekel (University of Windsor, Canada)*

**12.50-13.00: Closing Remarks**

**13.00-14.00: Lunch**

**14.00-15.30: Special Session on Smart Transport**