

First International Workshop on Mobile and Pervasive Internet of Things (PerIoT 2017)

(In conjunction with IEEE PerCom 2017)

March 13 (Monday), Kona, Big Island, Hawaii, USA

8:45 – 9:00 **Introduction and Opening Remarks**

9:00 – 10:00 **Keynote Talk**

Session Chair: Farzana Rahman

Keynote Talk: Pushing Down User Information to Enhance Smart Device System Design by Dr. Gang Zhou, College of William and Mary

10:00 – 10:30 **Coffee Break**

10:30 – 12:00 **Session 1: IoT Applications**

Session Chair:

1. Daily Living Activity Recognition with ECHONET Lite Appliances and Motion Sensors

Kazuki Moriya (Nara Institute of Science and Technology, Japan); Eri Nakagawa (Nara Institute of Science and Technology, Japan); Manato Fujimoto (Nara Institute of Science and Technology, Japan); Hirohiko Suwa (Nara Institute of Science and Technology, Japan); Yutaka Arakawa (Nara Institute of Science and Technology & NAIST, Japan); Aki Kimura (Mitsubishi Electric Corporation, Japan); Satoko Miki (Mitsubishi Electric Corporation, Japan); Keiichi Yasumoto (Nara Institute of Science and Technology, Japan)

2. Characterizing Road Segments Using Compass Sensors to Predict Approaching Bus Stops

Danila Chenchik (University of North Carolina at Chapel Hill, USA); Jia Chen (University of North Carolina at Chapel Hill, USA); Stephen Yan (University of North Carolina at Chapel Hill, USA); Shahriar Nirjon (University of North Carolina at Chapel Hill, USA)

3. A Wireless IoT System Towards Gait Detection in Stroke Patients

AKM Jahangir Alam Majumder (Miami University, USA); Yosuf ElSaadany (Miami University, USA); Mohammed ElSaadany (Miami University, Oxford, Ohio, USA); Donald Ucci (Miami University, USA); Farzana Rahman (James Madison University, USA)

4. Context-Aware and User-Centric Residential Energy Management

Baris Aksanli (San Diego State University, USA); Jagannathan Venkatesh (UCSD, USA); Christine Chan (University of California, San Diego, USA); Alper Sinan Akyurek (University of California - San Diego, USA); Tajana Simunic Rosing (University of California, San Diego, USA)

12:00 – 13:15 **Lunch Break**

13:15 – 14:45 **Session 2: Protocols and Services for IoT**

Session Chair:

1. Delay Tolerant Routing Protocol for Heterogeneous Marine Vehicular Mobile Ad-hoc Network

Subhasri Duttagupta (Tata Consultancy Services, India); Maneesha Vinodini Ramesh (Amrita Vishwa Vidyapeetham, Amrita University, India); Dhanesh Raj (Amrita VishwaVidyapeetham, India)

2. Maximizing Coverage in Low-Power Wide-Area IoT Networks

Alan Marchiori (Bucknell University, USA)

3. The Hint Protocol: Using a broadcast method to enable ID-free data transmission for dense IoT devices

Yi Ren (National Chiao Tung University, Taiwan); Ren-Jie Wu (National Chiao Tung University, Taiwan); Yu-Chee Tseng (National Chiao-Tung University, Taiwan)

4. Large-scale Offloading in the Internet of Things

Huber Flores (University of Oulu, Finland); Xiang Su (University of Oulu, Finland); Vassilis Kostakos (University of Oulu, Finland); Aaron Yi Ding (Technical University of Munich, Germany); Petteri Nurmi (Helsinki Institute for Information Technology HIIT, Finland); Sasu Tarkoma (University of Helsinki, Finland); Pan Hui (Hong Kong University of Science and Technology & Telekom Innovation Laboratories, Hong Kong); Yong Li (Tsinghua University, P.R. China)

14:45 – 15:15 **Coffee Break**

15:15 – 16:20 **Session 3: Design and Analysis of IoT Components**

Session Chair:

1. RoCoSys: A Framework for Coordination of Mobile IoT Devices

Christian Krupitzer (University of Mannheim, Germany); Martin Breitbach (University of Mannheim, Germany); Johannes Saal (University of Mannheim, Germany); Christian Becker (Universität Mannheim, Germany); Michele Segata (University of Trento, Italy); Renato Lo Cigno (University of Trento, Italy)

2. Design and Verification of IEEE 802.11ah for IoT and M2M Applications

Rami Akeela (Santa Clara University, USA); Yacoub Elziq (JimzuTech, USA)

3. Data Analysis of Transit Systems Using low-cost IoT Technology

Samy S. El-Tawab (James Madison University, USA); Raymond Oram (James Madison University, USA); Michael Garcia (James Madison University, USA); Chris Johns (James Madison University, USA); B. Brian Park (University of Virginia, USA)

16:20 – 16:30 **Closing Remarks**