

Second International Workshop on Mobile and Pervasive Internet of Things (PerIoT 2018)

Monday, March 19, 2018

8:45 – 9:00 Introduction and Opening Remarks

9:00 – 10:00 Keynote Talk [*Session Chair: Dr. Samy El-Tawab; James Madison University, USA*]

Sensor-less Sensing: The Future of Ubiquitous Context-Awareness for the IoT

Dr. Moustafa Youssef, Wireless Research Center Egypt-Japan University of Science and Technology (E-JUST)



Moustafa Youssef is a Professor of CSE and Founder & Director of the Wireless Research Center at Egypt-Japan University of Science and Technology (E-JUST) and Alexandria University. His research interests include mobile computing, location determination technologies, pervasive computing, mobile wireless networks, and network security. He is an associate editor for the ACM TSAS, a previous area editor of the ACM MC2R and served on the organizing and technical committees of numerous prestigious conferences. Prof. Youssef is a steering committee member of the Egyptian IoT Forum. He is the recipient of the 2003 University of Maryland Invention of the Year award, the 2010 TWAS-AAS-Microsoft Award for Young Scientists, the 2012 Egyptian State Award, the 2013 and 2014 COMESA Innovation Awards, the 2013

ACM SIGSpatial GIS Conference Best Paper Award, multiple Google Research Awards, among many others. He is also an ACM Distinguished Speaker and an ACM Distinguished Scientist.

10:00 – 10:30 Coffee break

10:30 – 12:00 Session 1: IoT Systems and Deployments

[*Session Chair: Dr. Puya Ghazizadeh; Seton Hall University, USA*]

Detecting Spies in IoT Systems using Cyber-Physical Correlation

Brent Lagesse , Kevin Wu, Jaynie Shorb and Zealous Zhu (University of Washington Bothell, USA)

Awakening the Cloud Within: Energy-Aware Task Scheduling on Edge IoT Devices

Hend Gedawy‡, Karim Habak*, Khaled A. Harras†, Mounir Hamdi‡ (‡Hamad Bin Khalifa University, Qatar; *Georgia Institute of Technology, USA ; †Carnegie Mellon University, USA)

Overview of Cellular LPWAN Technologies for IoT Deployment: Sigfox, LoRaWAN, and NB-IoT

Kais Mekki¹, Eddy Bajic¹, Frederic Chaxel¹, Fernand Meyer² (¹ Research Centre for Automatic Control of Nancy; ²OKKO SAS), France

12:00 – 13:30 Lunch break

13:30 – 15:00 Session 2: Systems and Applications in IoT [Session Chair: Dr. Brent Lagesse; University of Washington Bothell, USA]

Using Spreadsheet-defined Rules for Reasoning in Self-Adaptive Systems

Christian Krupitzer, Guido Drechsel, Deborah Mateja, Alina Pollklausener, Florian Schrage, Timo Sturm, Aleksandar Tomasovic, and Christian Becker (University of Mannheim, Germany)

A Propagation Based Model for Communication in Vehicular Cloud

Puya Ghazizadeh (Seton Hall University, USA), Reza Fathi (University of Houston, USA)

MagController: A System for Touchless Mobile Devices Control Using the Magnetic Field

Heba Abdelnasser (Alexandria University), Ayman Khalafallah (Alexandria University), and Moustafa Yousef (Alexandria University and E-JUST)

15:00 – 15:30 Coffee break

15:30 – 17:00 Session 3: Protocols and Standards [Session Chair: Dr. Samy El-Tawab; James Madison University, USA]

Lightweight M2M protocol: Archotyping an IoT device, and deploying an upgrade architecture

Iago Felipe Trentin ^{1,2,3}, Samuel Berlemont ², and Dante Augusto Couto Barone ³ (¹Grenoble INP, France; ² Orange Labs, France; ³ UFRGS, Brazil)

Revisiting Trust of Integrating IoT in Enterprise

Mohsen Dorodchi, Maryam Abedi, Bojan Cukic (UNCC University of North Carolina-Charlotte, USA)

Scalable and Adaptive Polling Protocol for Concurrent Wireless Sensor Data Flows

Manos Koutsoubelias, Antonis Argyriou and Spyros Lalis (University of Thessaly, Greece)

17:00 – 17:20 Closing remarks