Monday, 27 August 2018 14:00-17:30 Room: TBD

W5: Vehicular Information Services for the Internet of Things

The Internet of Things (IoT) has recently gained great attention from both academia and industry. Among the key enablers of IoT, smart vehicles have been promising solutions for providing on-road communication and ubiquitous information services. The real value of vehicular resources is much realized when translated into information services that put these resources into action. Expanding the smart vehicle-based services/applications beyond the intelligent transportation services requires research and development efforts to explore new service scopes, create innovative system architectures, and design enabling technologies. Enabling pervasive and diversified vehicular service provisioning in the IoT era entails synergizing several related technologies such as distributed cloud and fog computing, networking infrastructures, crowdsourcing, public sensing, information-centric networking, privacy and security techniques.

This workshop is designed to highlight the ongoing efforts towards vehicular service provisioning and related technology blend. The workshop also addresses issues that arise when dealing with smart vehicles such as resource and service discovery, data communication and delivery, quality of information assessment, resource recruitment, and incentive modelling.

General Chairs:

Sherin Abdelhamid, Queen's University, Canada Khalid Elgazzar, University of Louisiana at Lafayette, USA

Technical Program Committee:

Damla Turgut, University of Central Florida Aboelmagd Noureldin, Royal Military College Hatem Abou-zeid, Ericsson Canada

Program

Monday, 27 August 2018 14:00-14:40

Keynote

Building the Ultimate Smart Driving Machine: Integrating Digital Services with the Vehicle

Alvin Chin, BMW Technology Group

Monday, 27 August 2018 14:40-15:30

Session I

1 An MDP Model of Vehicle-Pedestrian Interaction at an Unsignalized Intersection

Ya-Chuan Hsu, Swaminathan Gopalswamy, Srikanth Saripalli, Dylan A. Shell, Texas A&M University

2 Ultra-Low Power IoT Traffic Monitoring System

Siraj Muhammad, University of Oklahoma; Hazem Refai, University of Oklahoma; Matthew Blakeslee, Oklahoma Department of Transportation

Amr El Mougy, German University in Cairo Mervat AbuElkheir, Mansoura University Karim Emara, Ain Shams University Ala Abu Alkheir, University of Ottawa Eslam AbdAllah, Ain Shams University Tamer Abdelkader, Ain Shams University Salimur Choudhury, Lakehead University

Monday, 27 August 2018 16:00-17:30

Session II

1 A Deep Learning Approach for Automotive Radar Interference Mitigation

Jiwoo Mun, Heasung Kim, Jungwoo Lee, Seoul National University

2 Traffic-Aware Traffic Signal Control Framework Based on SDN and Cloud-Fog Computing

Hung-Chin Jang, Ting-KuanLin, National Chengchi University

3 Adaptive Time-Bound Key Management Scheme For The Internet of Things

Noran AboDoma, British University in Egypt; Ahmad Mostafa, British University in Egypt; Eman Shaaban, Ain Shams University