



SmartCity 2016 Program

08:30 – 10:00, 11 April

[Opening and Keynote](#)

Chair: Prof. Michele Zorzi

Keynote: Smart Transportation Corridors with Connected Vehicles

A safe and efficient transportation system (including non-motorized vehicles and shared transportations) will be a key component for any future smart and sustainable cities. Connected and Automated Vehicles (CAV) are a rapidly emerging technologies that have the potential to improve mobility, enhance safety, and improve efficiency. A fully connected transportation system (CAVs and roadside units) will have the ability to communicate and share a massive amount of data in real-time. We will demonstrate how cooperative driving technology (CACC), vehicle speed control, and platooning can increase the efficiency of vehicle streams. We also explore methods of fusing/combining real-time traffic data smart infrastructure and vehicles to automate the detection of incidents (e.g., accidents), to classify different transportation modes at intersections, and enable more efficient control decisions, e.g, traffic light controllers. Lastly, we discuss how wireless enabled IoT devices can be leveraged to develop an active pedestrian detection system for smart crosswalks or intersection.

Speaker: Prof. Chen-Nee Chuah from UC Davis

Speaker information: Chen-Nee Chuah is a Professor in Electrical and Computer Engineering at the University of California, Davis. She received her Ph.D. in Electrical Engineering and Computer Sciences from the University of California, Berkeley. Her research interests include network measurements and management, anomaly detection, software defined networking, and data analytics for massive online social platforms and intelligent transportation systems. Chuah is a Fellow of the IEEE and an ACM Distinguished Scientist. She received the NSF CAREER Award in 2003, and the Outstanding Junior Faculty Award from the UC Davis College

of Engineering in 2004. In 2008, she was named a Chancellor's Fellow of UC Davis. She has served on the executive/technical program committee of several ACM and IEEE conferences. She had served as an Associate Editor for IEEE/ACM Transactions on Networking, and is currently an Associate Editor for IEEE Transactions on Mobile Computing.

10:00 – 10:30, 11 April

Coffee break

10:30 – 12:00, 11 April

Smart Cities and Urban Computing I

A Gaussian Bayesian Model to Identify Spatio-temporal Causalities for Air Pollution based on Urban Big Data

Julie Yixuan Zhu (the University of Hong Kong, Hong Kong);

Yu Zheng (Microsoft Research Asia, P.R. China);

Xiuwen Yi (Southwest Jiaotong University, P.R. China);

Victor O. K. Li (University of Hong Kong, P.R. China)

Preliminary Design for Sustainable BLE Beacons Powered By Solar Panels

Kang Eun Jeon, Tommy Tong, James She (Hong Kong University of Science and Technology, Hong Kong)

Delay Tolerant Video Upload from Public Vehicles

Ali Safari Khatouni (Politecnico di Torino, Italy);

Marco G Ajmone Marsan (Politecnico di Torino & IMDEA Networks, Italy);

Marco Mellia (Politecnico di Torino, Italy)

Navigating the Last Mile with Crowdsourced Driving Information

Xiaoyi Fan and Jiangchuan Liu (Simon Fraser University, Canada);

Zhi Wang (Tsinghua University, P.R. China);

Yong Jiang (Graduate School at Shenzhen, Tsinghua University, P.R. China)

10:30 – 12:00, 11 April

Lunch

13:30 – 15:00, 11 April

Smart Cities and Urban Computing II

T2CBS: Mining Taxi Trajectories for Customized Bus Systems

Yan Lyu and Chi-Yin Chow (City University of Hong Kong, Hong Kong);
Victor Lee (City University of Hong Kong, P.R. China);
Yanhua Li (Worcester Polytechnic Institute, USA);
Jia Zeng (Noah's Ark Lab, Huawei & Soochow University, Hong Kong)

Characterising Demand and Usage Patterns in a Large Station-based Car Sharing System

Chiara Boldrini, Raffaele Bruno and Marco Conti (IIT-CNR, Italy)

Characterizing Successful Packet Transmission in a Vehicular Ad Hoc Network

Ali Rakhshan (University of Massachusetts, USA);
Hossein Pishro-Nik (University of Massachusetts, Amherst, USA)

An ICN-Based Publish-Subscribe Platform to Deliver UAV Service in Smart Cities

Ali Shariat (University of Toronto, Canada);
Ali Tizghadam (TELUS & University of Toronto, Canada);
Alberto Leon-Garcia (University of Toronto, Canada)

15:30 – 17:00, 11 April

Smart Cities and Urban Computing III

Interconnecting Smart Cities by Vehicles: How feasible is it?

Florian Hagenauer (Paderborn University, Germany);
Christoph Sommer (University of Paderborn, Germany);
Ryokichi Onishi (Toyota InfoTechnology Center Co., Ltd., Japan);
Matthias S Wilhelm (Toyota InfoTechnology Center, Japan);
Falko Dressler (University of Paderborn, Germany);
Onur Altintas (Toyota InfoTechnology Center, Japan)

Stack4Things as a fog computing platform for Smart City applications

Giovanni Merlino and Salvatore Distefano (University of Messina, Italy);
Francesco Longo and Dario Bruneo (Universita di Messina, Italy);
Antonio Puliafito (University of Messina, Italy);
Valeria D'Amico, Marco Sapienza and Giovanni Torrisi (Telecom Italia, Italy)

Cell-to-Cell Activity Prediction for Smart Cities

Blerim Cici and Emmanouil Alimpertis (University of California, Irvine, USA);
Alexander Ihler (UC Irvine, USA);
Athina Markopoulou (University of California, Irvine, USA)

Facilitating Mobile Access to Social Media Content on Urban Underground Metro Systems

Di Wu (Hunan University & Imperial College London, P.R. China);

Lambros Lambrinos (Cyprus University of Technology & Imperial College London, Cyprus);

Thomas Przepiorka and Julie McCann (Imperial College London, United Kingdom)

17:00 – 18:00

Panel discussion on smart city experiences – TBD