

The EITA Smart Cities Forum 2016 -(EITA Knowledge and Smart Technology 2016)

"Knowledge, Smart Technology and the Internet of Things: Challenges, Opportunities and Future Directions"

The Maclaurin Buildings (4) Massachusetts Institute of Technology Cambridge, Massachusetts, U.S.A.

Friday, August 26, 2016

Program

(Draft as of 08/27/16)

Day 1 (Friday, August 26, 2016)

8/26 (Fri) 8:30 am - 6:00 pm: Registration Room: 4-257

8/26 (Fri) 9:30 am - 9:50 am: Opening Session

Co-Chair: Dr. Michael Chang, Chief Executive Officer, Kyper Data Technologies

Co-Chair: **Dr. Sheng-Ying (Aithne) Pao**, Director of Strategic Innovation, Lee Kum Kee Group and MIT Media Lab Room: 4-257

Welcome Remarks:

Mr. Ming-chi Scott Lai Director-General Taipei Economic and Cultural Office in Boston

(駐波士頓台北經濟文化辦事處賴銘琪處長)

Plenary Sessions:

8/26 (Fri) 9:50 am - 10:35 am: Plenary Session (I):

Chair: **Dr. Michael Chang,** Chief Executive Officer, Kyper Data Technologies Room: 4-257

Plenary Speaker:

"Alzheimer's Disease Sequencing Project" **Dr. Li-San Wang** Associate Professor of Pathology and Laboratory Medicine Co-Director, Penn Neurodegeneration Genomics Center University of Pennsylvania Perelman School of Medicine (賓州大學醫學院王立三教授)

8/26 (Fri) 10:35 am - 11:20 am: Plenary Session (II):

Chair: **Dr. Sheng-Ying (Aithne) Pao**, Director of Strategic Innovation, Lee Kum Kee Group and MIT Media Lab (麻省理工學院包盛盈博士) Room: 4-257

Plenary Speaker:

"The Smart Localized Water Solution" **Dr. Ting-Yun Sasha Huang** CEO, AquaFresco Inc.

8/26 (Fri) 11:20 am - 11:35 am: Break

8/26 (Fri) 11:35 am - 12:20 pm: Plenary Session (III):

Chair: **Dr. Woei-jyh (Adam) Lee,** Tyser Teaching Fellow of Information Systems, Robert H. Smith School of Business, University of Maryland, College Park (馬里蘭大學學院市分校史密斯商學

院李偉智教授) Room: 4-257

Plenary Speaker:

Dr. Michael Chang

Chief Executive Officer Kyper Data Technologies

8/26 (Fri) 12:20 pm - 1:50 pm: Lunch

Parallel Sessions:

8/26 (Fri) 1:50 pm – 3:20 pm: Technical Session D1-W1-T1: Smart Cities, the Internet of Things, Smart Technologies and Applications (Smart Computing, Smart Mobility and Transportation, Smart Environments, Smart Supply Chain and Logistics, Smart Manufacturing, Smart Energy Systems, Smart Weather Forecasting, and)

Chair: **Dr. Chen-Hsiang (Jones) Yu,** Founder and CEO, Prentice Lab, (Prentice Lab 余禎祥博士) Room: 4-257

"Distributed Energy Management in Power Networks" **Dr. Na (Lina) Li** Assistant Professor in Electrical Engineering and Applied Mathematics School of Engineering and Applied Sciences Harvard University

Dr. Wencong Su

Assistant Professor, Department of Electrical and Computer Engineering University of Michigan-Dearborn

"The climate change implications of the Paris agreement"

Dr. Erwan Monier

Principal Research Scientist, Center for Global Change Science Joint Program on the Science and Policy of Global Change Massachusetts Institute of Technology

"The Usage of Social Media Geospatial Aggregators for Disaster Response in Large Cities" **Dr. Thomas Chandler**

Associate Research Scientist, National Center for Disaster Preparedness, The Earth Institute Adjunct Assistant Professor, Communication, Media, and Learning Technologies Design, Teachers College, Columbia University

8/26 (Fri) 1:50 pm - 3:20 pm: Technical Session D1-W2-T1: Smart Healthcare Technologies, Services and Applications (Computational Intelligence, Emerging Intelligent Technologies and Applications, Datadriven Discoveries and Uncertainty Quantification, High Performance/High Throughput (HPC/HTC), and Cloud Computing)

Chair: **Dr. Sheng-Ying (Aithne) Pao**, Director of Strategic Innovation, Lee Kum Kee Group and

MIT Media Lab (麻省理工學院包盛盈博士) Room: 4-265

"Big Data and Network Biology: A Case Study"

Dr. Jason Tsong-Li Wang Professor of Bioinformatics and Computer Science Director, Data and Knowledge Engineering Lab & Bioinformatics Center Department of Computer Science New Jersey Institute of Technology (紐澤西理工學院電腦科學系暨數據知識工程實驗室及生物資訊中心主任王中力教授)

Dr. Hau-Tieng Wu

Assistant Professor, Department of Mathmatics University of Toronto (多倫多大學數學系吳浩榳教授)

"The Use of Wearable Sensors and Systems in Rehabilitation Medicine" **Dr. Sunghoon Ivan Lee** Assistant Professor, College of Information and Computer Sciences University of Massachusetts, Amherst

Dr. Woei-jyh (Adam) Lee

Tyser Teaching Fellow of Information Systems, Robert H. Smith School of Business University of Maryland, College Park

(馬里蘭大學學院市分校史密斯商學院李偉智教授)

"Inference of genes associated with cancer targeted therapy resistance" **Dr. Peng Jiang** Postdoctoral Research Fellow, Department of Biostatistics and Computational Biology Dana-Farber Cancer Institute Harvard University

8/26 (Fri) 3:20 pm – 3:35 pm: Break

Parallel Sessions:

8/26 (Fri) 3:35 pm - 5:05 pm: Technical Session D1-W1-T2: Smart Cities, the Internet of Things, Smart Technologies and Applications (Smart Computing, Smart Mobility and Transportation, Smart Environments, Smart Supply Chain and Logistics, Smart Manufacturing, Smart Energy Systems, Smart Weather Forecasting, and)

Chair: **Dr. Chen-Hsiang (Jones) Yu,** Founder and CEO, Prentice Lab, (Prentice Lab 余禎祥博士) Room: 4-257

"Incorporating Transit Capacity Constraints into the Regional Travel Demand Model" **Dr. Jieping Li** Senior Transportation Analyst

Central Transportation Planning Staff The Boston Region Metropolitan Planning Organization (MPO)

Dr. Chen-Hsiang (Jones) Yu

Founder and CEO, Prentice Lab (Prentice Lab 余禎祥博士)

"Constrained optimization methods for collaborative multi-robot motion planning and control" **Dr. Javier Alonso Mora**

Postdoctoral Associate, Computer Science and Artificial Intelligence Laboratory (CSAIL) Massachusetts Institute of Technology

"Impact of Urban Surface Albedo on Regional and Local Scales using the WRF model" **Dr. Liyi Xu** Postdoctoral Associate, Center for Global Change Science

Massachusetts Institute of Technology

8/26 (Fri) 3:35 pm - 5:05 pm: Technical Session D1-W2-T2: Smart Healthcare Technologies, Services and Applications (Computational Intelligence, Emerging Intelligent Technologies and Applications, Datadriven Discoveries and Uncertainty Quantification, High Performance/High Throughput (HPC/HTC), and Cloud Computing)

Chair: **Dr. Hau-Tieng Wu**, Assistant Professor, Department of Mathmatics, University of Toronto (多倫多大學數學系吳浩榳教授) Room: 4-265

"A Constraint Mixture of Bayesian Hierarchical Models for Paired Data with Application to Genomic Outcome Screening"

Dr. Weiliang Qiu

Assistant Professor, Channing Division of Network Medicine Brigham and Women's Hospital Harvard Medical School

Dr. Sheng-Ying (Aithne) Pao

Director of Strategic Innovation, Lee Kum Kee Group and MIT Media Lab (麻省理工學院包盛盈博士) "How smart is your medicine? An overview on Precision Medicine and a view from the ground" **Dr. Chiao-Feng Lin** Senior Bioinformatician, Partners HealthCare Personalized Medicine; Research Associate at Harvard Medical School (Partners HealthCare 林嬌鳳博士)

"Metagenome and metatranscriptome data analysis in human microbiome studies" **Dr. Wen-Chi Chou** Postdoctoral Associate Broad Institute of MIT and Harvard