

Large-Scale Participatory Urban Sensing: A Fad or Reality?

Archan Misra

School of Information Systems,
Singapore Management University, Singapore
E-mail: archanm@smu.edu.sg

Juha Laurila

Nokia Research Center,
Finland
Email: Juha.K.Laurila@nokia.com

Abstract—This paper describes the topic and participants of the MDM 2013 panel.

I. PANEL DESCRIPTION

One of the popular research trends at present focuses on the use of sensor data generated/collected by consumer mobile devices to infer the urban state. There are a fairly large number of research initiatives that view such a citizen-centric distributed and mobile sensing platform as one of the most promising ways to gather data about various aspects of cities, such as environmental parameters & pollution levels, traffic congestion, popularity of events at various public spaces, etc.

However, there are many skeptics who doubt that this decentralized, bottom-up approach can be an effective & commercially viable approach in the long run, due to open challenges in many aspects, such as resource limitations, privacy, data quality and incentives. This panel will explore how academia and industry are tackling these challenges and debate on what types of applications are likely to be sustainable under this crowd-sourced paradigm.

II. CONFIRMED PARTICIPANTS

The following are the list of confirmed panelists.

A. Dipanjan Chakraborty

Dr. Chakraborty works as an Advisory Researcher at IBM Research India. He has 12+ years of experience in Research and Innovation. His primary research interests are in Mobile and Context-aware Computing and Services, Social Networks; Sensor Networks, and more recently on cloud-coordinated mobile sensing, semantic knowledge inferencing and behavior models of community sensing.

Till date he has co-authored around 70 peer-reviewed publications. His work has received around 2500 citations. He has filed 21 patents and has 8 issued patents. At IBM, he has received multiple research division accomplishment awards for his work in the area of Context-aware services. He has been involved in organizing international conferences and workshops such as Mobile Data Management, Percom, Comsnets, International Conference on Pervasive Services, etc.



Fig. 1. Dr. Dipanjan Chakraborty, IBM Research

B. Jason Jingshi Li

Dr. Jason Jingshi Li is currently a researcher at the Artificial Intelligence Laboratory at the Swiss Federal Institute of Technology in Lausanne (EPFL). His work integrates theory and models in spatial reasoning, machine learning and computational game theory to develop efficient and intelligent systems in real and artificial environments.

His current research interests include developing spatial models for monitoring urban air quality from a network of mobile sensors, and designing new mechanisms for incentivizing truthful and helpful reporting in community sensing.

His research has been supported by the Swiss National Science Foundation, the Australian Research Council and National ICT Australia Ltd. He is a member of IEEE and AAAI, and he has served on the program committees of the International Joint Conference on Artificial Intelligence (IJCAI) and the AAAI Conference on Artificial Intelligence (AAAI).

C. Demetrios Zeinalipour-Yazti

Dr. Demetrios Zeinalipour-Yazti is an Assistant Professor of Computer Science at the University of Cyprus, directing the Data Management Systems Laboratory (DMSL). He got his Ph.D. and M.Sc. in Computer Science and Engineering from the University of California - Riverside in 2005 and



Fig. 2. Dr. Jason Jingshi Li, EPFL

2003, respectively. He got his B.Sc. in Computer Science from the University of Cyprus in 2000. He has also been a visiting researcher at the Network Intelligence Lab of Akamai Technologies Cambridge, USA in 2004.

His research interests include Data Management in Systems and Networks, including: Distributed Query Processing, Storage and Retrieval Methods for Sensor, Smartphone and Peer-to-Peer Systems, Mobile Data Management and Network Data

Management.

Dr. Zeinalipour-Yazti has been a PC Co-Chair for IEEE MDM10, DMSN10 (with VLDB10) and ACM MobiDE09 (with SIGMOD09). He has also been the Contest Chair for IEEE ICDM10 and the Demo Co-chair for IEEE MDM13. For more information please visit: <http://www.cs.ucy.ac.cy/dzeina/>.



Fig. 3. Dr. Demetrios Zeinalipour-Yazti, University of Cyprus