IEEE MDM 2014
15th IEEE International Conference on Mobile Data Management

15-18 July, 2014
The University of Queensland
Brisbane, Queensland, Australia
MESSAGE FROM THE IEEE MDM 2014 GENERAL CO-CHAIRS

Welcome to the proceedings of the 15th IEEE International Conference on Mobile Data Management (MDM 2014) held at The University of Queensland, St Lucia Campus in Brisbane, Australia, July 15 - 18, 2014.

The MDM series of conferences, since its debut in December 1999, has established itself as a prestigious and reputable forum for sharing of original research results and practical experiences on the management and use of mobile data. The term mobile in MDM has been used from the very beginning in a broad sense to encompass all aspects of mobility - aspects related to wireless, portable and tiny devices. This is also reflected in this year’s MDM scope which includes emerging research areas of the Internet of Things, cyber-physical systems and big data.

MDM has been an IEEE Computer Society conference, sponsored by the Technical Committee on Data Engineering (TCDE) since 2011. Until 2011, some of MDM events have been organized with Technical In-cooperation with IEEE, which also published its proceedings since 2006. MDM has achieved this elevated status thanks to the previous and current chairs of TCDE, Paul Larson, David Lomet and Kyu-Young Whang. We would like to thank all of them as well as the TCDE executive committee for their endorsement. Thanks also go to the IEEE conference management and publishing staff who helped us achieve the status and prepare the conference.

MDM 2014 continued the tradition of a strong technical program with demos along with specialized workshops, PhD forum, advanced seminars, industry sessions, invited talks and a panel. We are also proud of MDM tradition to run as a predominantly single-track research-intensive conference. This year we had three special invited speakers. Our first invited speaker was Bernhard Mitschang of the University of Stuttgart, who gave an exciting talk “Enterprise Apps and Mobile Data in Smart Factories”. Our second invited speaker was Tim Wark from CSIRO. Tim directs a strategic research think-tank on sensors and sensor networks at CSIRO. His insightful talk has the title “Future challenges in managing mobile and sensor data in industry-driven research”. The closing keynote speaker was Dik Lun Lee from Hong Kong University of Science and Technology. Dik was one of the founding fathers of the MDM conference series fifteen years ago. His inspiring talk was titled “Mobile Data Management: from Human-Human to Machine-Machine Communication”.

We would like to express our thanks to Advanced Seminar speakers Maria Luisa Damiani (University of Milano, Italy), Vladimír I. Zadorozhny (University of Pittsburgh, USA) and Sanjay Madria (Missouri University of Science and Technology, Rolla, USA).

We would like to thank all the authors of the submitted papers, the Program Committee members and reviewers for their thoughtful reviews. We would like to thank the session chairs for their contribution to running MDM2014. We are grateful to the MDM Organizing Committee team that really worked as a team regularly meeting in cyberspace and together moving the MDM2014 forward. We thank the PC co-chairs...
Jadwiga Indulska (University of Queensland, Australia), Daniela Nicklas (University of Bamberg, Germany) and Mohamed F. Mokbel (University of Minnesota-Twin Cities, USA) for their hard work and putting together an excellent technical program; the Workshop co-chairs Claudia Roncancio (University of Grenoble, France) and Goce Trajcevski (Northwestern University, USA) as well as HuMoComp workshop organizers Rui Zhang (The University of Melbourne, Australia), Kai Zheng (The University of Queensland, Australia) and Nicholas Jing Yuan (Microsoft Research, China) and M-CROS workshop organizers Sanjay Kumar Madria (Missouri University of Science and Technology, USA) and Anirban Mondal (Xerox Research Center India) for strong focused research contribution; the Publicity co-chairs Nilanjan Banerjee (IBM Research Labs, India), Andreas Konstantinidis (University of Cyprus, Cyprus), Michael Sheng (University of Adelaide, Australia) and Jingtao Wang (University of Pittsburgh, US) for flooding the Internet with MDM promotion messages; the Proceedings chair Chi-Yin Chow (City University of Hong Kong, Hong Kong) whose tireless efforts on putting together MDM2014 proceedings is impossible to overestimate; the Advanced Seminar co-chairs Mohamed Gaber (Robert Gordon University, UK) and Rui Zhang (University of Melbourne, Australia) for attracting exciting speakers, the Panel “Mobile Big Data Analytics: Research, Practice and Opportunities” co-chairs Shonali Krishnaswamy (I2R, Singapore) and Demetris Zeinalipour (University of Cyprus, Cyprus) for addressing hot and exciting research challenges; the Industry Track co-chairs Peizhao Hu (NICTA, Australia) and Dipanjan Chakraborty (IBM Research Labs, India) for boosting industry participation and interest to MDM2014; the PhD Forum co-chairs Jari Veijalainen (University of Jyvaskyla, Finland) and Mohamed Sharaf (The University of Queensland, Australia) for encouraging and bringing young talent to MDM research community; the Demo co-chairs Seng Loke (LaTrobe University, Australia) and Vladimir Zadorozhny (University of Pittsburgh, USA) for organizing an exciting demo session. Much appreciation and thanks go to Local Organizing Chair Prem Jayaraman (CSIRO, Australia), MDM2014 web-masters Karan Mitra (Luleå University of Technology, Sweden), Andreas Konstantinidis (University of Cyprus, Cyprus) and Jingtao Wang (University of Pittsburgh, USA) as well as to many student volunteers. We thank Myrene Portmann of Portmann Events Consulting, the Conference Secretariat, for managing the conference logistics, administration, catering, venue negotiations, bookings, equipment, conference materials, financial reports and registration system.

Many thanks go to financial co-sponsors of MDM 2014 - IEEE Computer Society and CSIRO. MDM has strong support base among industry, academia and government research agencies. This year we received support from IBM for best student paper awards which is thankfully acknowledged.

We hope that you will enjoy the MDM 2014 and have a wonderful stay in the beautiful and hospitable city of Brisbane.

IEEE MDM 2014 General Co-Chairs

Arkady Zaslavsky, CSIRO, Australia
Panos K. Chrysanthis, University of Pittsburgh, USA
Christian Becker, University of Mannheim, Germany
<table>
<thead>
<tr>
<th>Time</th>
<th>Main Event</th>
<th>Parallel Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00am - 6:30pm</td>
<td>Conference Secretariat &amp; Registration (Location: HOLT ROOM)</td>
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<tr>
<td>9:00am - 10:30am</td>
<td>Opening, Keynote1 - Bernhard Mitschang (Universität Stuttgart, Germany)</td>
<td>Enterprise Apps and Mobile Data in Smart Factories (Location: ABEL SMITH Theatre)</td>
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<tr>
<td>10:30am - 11:00am</td>
<td>Coffee/Tea Break - (Location: HOLT ROOM)</td>
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<tr>
<td>11:00am - 12:30pm</td>
<td>Research session 1 (90 mins) (ABEL SMITH Theatre)</td>
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<tr>
<td>12:30pm - 1:30pm</td>
<td>Lunch - (Location: HOLT ROOM)</td>
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<tr>
<td>1:30pm - 3:00pm</td>
<td>Research session 2 (90 mins) (ABEL SMITH Theatre)</td>
<td>Advanced Seminar 1 (Location: SIR LLEW EDWARDS, ROOM 217)</td>
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<tr>
<td>3:00pm - 3:20pm</td>
<td>Coffee/Tea Break - (Location: HOLT ROOM)</td>
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<tr>
<td>3:20pm - 5:00pm</td>
<td>Research session 3 (100 mins) (ABEL SMITH Theatre)</td>
<td>Research session 4 (100 mins) (Location: SIR LLEW EDWARDS, ROOM 217)</td>
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<tr>
<td>5:00pm - 6:30pm</td>
<td>Demo (Location: SIR LLEW EDWARDS, ROOM 216 and Corridor outside 216 and 217)</td>
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<tr>
<td>6:30pm Onwards</td>
<td>Conference Welcome Cocktail Reception – Location: Building 14 (TERRACE ROOM)</td>
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## Day 2 - Wednesday 16th July 2014

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<tr>
<th>Time</th>
<th>Main Event</th>
<th>Parallel Event</th>
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<td>8:00am - 6:30pm</td>
<td>Conference Secretariat &amp; Registration (Location: HOLT ROOM)</td>
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<tr>
<td>9:00am - 10:30am</td>
<td>Research session 5 (90 mins) (Location: ABEL SMITH Theatre)</td>
<td>Advanced Seminar 2 (Location: SIR LLEW EDWARDS, ROOM 217)</td>
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<tr>
<td>10:30am - 11:00am</td>
<td>Coffee/Tea Break - (Location: HOLT ROOM)</td>
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<tr>
<td>11:00am - 12:40pm</td>
<td>Research session 6 (100 mins) (Location: ABEL SMITH Theatre)</td>
<td>Research session 7 (100 mins) (Location: SIR LLEW EDWARDS, ROOM 217)</td>
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<tr>
<td>12:40pm - 2:00pm</td>
<td>Lunch - (Location: HOLT ROOM)</td>
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<tr>
<td>2:00pm - 3:00pm</td>
<td>Keynote2 - Tim Wark (CSIRO Computational Informatics, Australia)</td>
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<td></td>
<td>Future Challenges in Managing Mobile and Sensor Data in Industry-Driven Research</td>
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<td></td>
<td>(Location: ABEL SMITH Theatre)</td>
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<tr>
<td>3:00pm - 3:30pm</td>
<td>Coffee/Tea Break - (Location: HOLT ROOM)</td>
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<tr>
<td>3:30pm - 5:00pm</td>
<td>Panel</td>
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<td></td>
<td>Topic: <strong>Mobile Big Data Analytics: Research, Practice and Opportunities</strong></td>
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<td></td>
<td>Panel co-organizers: Demetrios Zeinalipour-Yazti (University of Cyprus, Cyprus) and Shonali Krishnaswamy (Monash University, Australia and Institute for Infocomm Research, Singapore)</td>
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<td></td>
<td>(Location: ABEL SMITH Theatre)</td>
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<tr>
<td>6:30pm Onwards</td>
<td>Conference Dinner - Location: KOOKABURRA RIVER QUEEN I DINNER CRUISE</td>
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<td></td>
<td>Boarding at 6.30pm at the Riverside port, we depart at 7.00pm and returns at 10.00pm</td>
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**Day 3 - Thursday 17th July 2014**

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<th>Time</th>
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<tr>
<td>8:00am - 6:30pm</td>
<td>Conference Secretariat &amp; Registration (Location: HOLT ROOM)</td>
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<tr>
<td>9:00am - 10:30am</td>
<td>Research session 8 (90 mins) (Location: ABEL SMITH Theatre)</td>
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<td>Industrial Session 1 (Location: SIR LLEW EDWARDS, ROOM 217)</td>
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<tr>
<td>10:30am - 11:00am</td>
<td>Coffee/Tea Break - (Location: HOLT ROOM)</td>
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<tr>
<td>11:00am - 12:30pm</td>
<td>Research session 9 (90 mins) (Location: ABEL SMITH Theatre)</td>
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<td></td>
<td>Industrial Session 2 (Location: SIR LLEW EDWARDS, ROOM 217)</td>
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<tr>
<td>12:30pm - 1:30pm</td>
<td>Lunch - (Location: HOLT ROOM)</td>
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<tr>
<td>1:30pm - 3.00pm</td>
<td>Research session 10 (90 mins) (Location: ABEL SMITH Theatre)</td>
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<td>Advanced Seminar 3 (Location: SIR LLEW EDWARDS, ROOM 217)</td>
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<tr>
<td>3:00pm - 3:30pm</td>
<td>Coffee/Tea Break - (Location: HOLT ROOM)</td>
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<tr>
<td>3:30pm - 4:30pm</td>
<td>Keynote 3 - Dik Lun Lee (Hong Kong University of Science and Technology, Hong Kong) Mobile Data Management: from Human-Human to Machine-Machine Communication (Location: ABEL SMITH Theatre)</td>
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<tr>
<td>4:30pm</td>
<td>Conference Closing</td>
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## Day 4 - Friday 18th July 2014

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<th>Time</th>
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<tr>
<td>8:30am - 6:00pm</td>
<td>Conference Secretariat &amp; Registration (Location: HOLT ROOM)</td>
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<tr>
<td>9:00am - 10:30am</td>
<td>Workshop sessions - M-CROS (1) (Location: SIR LLEW EDWARDS, ROOM 217)</td>
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<tr>
<td>10:30am - 11:00am</td>
<td>Coffee/Tea Break - (Location: HOLT ROOM)</td>
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<tr>
<td>11:00am - 12:30pm</td>
<td>Workshop sessions - M-CROS (2) (Location: SIR LLEW EDWARDS, ROOM 217)</td>
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<tr>
<td>12:30pm - 1:30pm</td>
<td>Lunch - (Location: HOLT ROOM)</td>
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<tr>
<td>1:30pm - 3:00pm</td>
<td>PhD Colloquium (Location: SIR LLEW EDWARDS, ROOM 217)</td>
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<tr>
<td>3:00pm - 3:30pm</td>
<td>Coffee/Tea Break - (Location: HOLT ROOM)</td>
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<tr>
<td>3:30pm - 5:00pm</td>
<td>Workshop sessions - HuMoComp (Location: SIR LLEW EDWARDS, ROOM 217)</td>
</tr>
<tr>
<td>5:00pm</td>
<td>Conference Closing</td>
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RESEARCH SESSIONS

Research session 1: Query Processing (90 Mins)

Supporting Location-Based Services in a Main-Memory Database
Suprio Ray, Rolando Blanco and Anil Goel

Cost-efficient Spatial Network Partitioning for Distance-based Query Processing

K-Nearest Neighbor Queries with Operating Time Constraints in Time-Dependent Road Networks
Camila Ferreira Costa, Mario A. Nascimento, José A. F. Macêdo and Javam Castro Machado

Research session 2: Recommendation (90 Mins)

Trip Recommendation with Multiple User Constraints by Integrating Point-of-Interests and Travel Packages
Shih-Hsin Fang, Hsueh-Chan Lu and Vincent S. Tseng

Estimating Common Pedestrian Routes through Indoor Path Networks using Position Traces
Thor Siiger Prentow, Henrik Blunck, Kaj Grønbæk and Mikkel Baun Kjærgaard

WhereToGo: Personalized Travel Recommendation for Individuals and Groups
Long Guo, Jie Shao, Kian-Lee Tan and Yang Yang

Research session 3: Privacy + Authentication (100 Mins)

Differentially Private Location Recommendations in Geosocial Networks
Jiadong Zhang, Gabriel Ghinita and Chi-Yin Chow

Design, Implementation, and Evaluation of the Privacy Management Platform
Christoph Stach and Bernhard Mitschang
Spatial Task Assignment for Crowd Sensing with Cloaked Locations
Layla Pournajaf, Li Xiong, Vaidy Sunderam and Slawomir Goryczka

A Location-Based Authentication System Leveraging Smartphones
Yusuf Albayram, Mohammad Maifi Hasan Khan, Athanasios Bamis, Sotirios Kentros, Nhan Nguyen and Ruhua Jiang

Research session 4: Smart Cities and Sensor Clouds (100 Mins)
NITOS BikesNet: Enabling Mobile Sensing Experiments through the OMF Framework in a city-wide environment
Giannis Kazdaridis, Donatos Stavropoulos, Vasilis Maglogiannis, Thanasis Korakis, Spyros Lalis and Leandros Tassiulas

E-VeT: Economic Reward/Penalty-based System for Vehicular Traffic Management
Nilesh Padhariya, Ouri Wolfson, Anirban Mondal, Sanjay Madria and Varun Gandhi

Efficient and Secure Code Dissemination in Sensor Clouds
Vimal Kumar and Sanjay Madria

9 Million Bicycles? Extending Induction Loops with Bluetooth Sensing
Stephan Jansen, Dennis Höting, Jens Runge, Thomas Brinkhoff, Daniela Nicklas and Jürgen Sauer

Research session 5: RFID and Quality (90 Mins)
Handling False Negatives in Indoor RFID Data
Asif Iqbal Baba, Hua Lu, Torben Bach Pedersen and Xike Xie

Pattern-wise trust assessment of sensor data
Robert Gwadera, Mehdi Riahi and Karl Aberer
Trajectory Event Cleaning for Mobile RFID Objects
Guoqiong Liao, Philip S. Yu, Qianhui Zhong, Sihong Xie and Changxuan Wan

Research session 6: Middleware and More (100 Mins)

Effective Mobile Context Pattern Discovery via Adapted Hierarchical Dirichlet Processes
Jiangchuan Zheng, Siyuan Liu and Lionel Ni

ConCon: Context-aware Middleware for Content Sharing in Dynamic Participatory Environments
Michael Madhukalya and Mohan Kumar

Using Location-based Social Networks for Time-Constrained Information Dissemination
Iouliana Litou, Ioannis Boutsis and Vana Kalogeraki

MadApp: A Middleware for Opportunistic Data in Mobile Web Applications
Venkat Srinivasan and Christine Julien

Research session 7: Mobile Analytics (100 Mins)

A Clustering Approach to the Discovery of Points of Interest from Geo-Tagged Microblog Posts
Anders Skovsgaard, Darius Sidlauskas and Christian S. Jensen

Finding Dense locations in indoor tracking data
Tanvir Ahmed, Torben Bach Pedersen and Hua Lu

Mining Mobility Evolution from Check-in Datasets
Meng-Fen Chiang, Chien-Cheng Chen, Wen-Chih Peng and Philip S. Yu

A Smartphone User Activity Prediction Framework Utilizing Partial Repetitive and Landmark Behaviors
Shen-Shyang Ho and Peng Dai
Research session 8: Sensing and recognize (90 Mins)

Distinguishing Electric Vehicles from Fossil-Fueled Vehicles with Mobile Sensing
Markus Wüstenberg, Henrik Blunck, Kaj Grønbæk and Mikkel Baun Kjærgaard

Cloud-based Query Evaluation for Energy-Efficient Mobile Sensing
Tianli Mo, Sougata Sen, Lipyeow Lim, Archan Misra, Rajesh Krishna Balan and Youngki Lee

Overhearing-based Efficient Boundary Detection in Dense Mobile Wireless Sensor Networks
Kazuya Matsuo, Keisuke Goto, Akimitsu Kanzaki, Takahiro Hara and Shojiro Nishio

Research session 9: Search and Index (90 Mins)

Social-Aware Top-k Spatial Keyword Search
Dingming Wu, Yafei Li, Byron Choi and Jianliang Xu

Keyword Based Semantic Search for Mobile Data
Jihoon Ko, Sangjin Shin, Sungkwang Eom, Minjae Song, Jooik Jung, Dong-Hoon Shin, Kyong-Ho Lee and Yongil Jang

ToSS-it: A Cloud-based Throwaway Spatial Index Structure for Dynamic Location Data
Afsin Akdogan, Cyrus Shahabi and Ugur Demiryurek

Research session 10: Top-K (90 Mins)

Efficient Retrieval of Top-k Most Similar Users from Travel Smart Card Data
Bolong Zheng, Kai Zheng, Mohamed Sharaf and Xiaofang Zhou

Efficient Top-k Spatial Locality Search for Co-located Spatial Web Objects
Qiang Qu, Siyuan Liu, Bin Yang and Christian Jensen
Top-k Query Processing and Malicious Node Identification against Data Replacement Attack in MANETs
Takuji Tsuda, Yuka Komai, Yuya Sasaki, Takahiro Hara and Shojiro Nishio

ADVANCED SEMINARS

Semantic Trajectories and Beyond
Maria Luisa Damiani (University of Milan, Italy) and Ralf Hartmut Guting (FernUniversität in Hagen, Germany)

Fusing Information, Crowdsourcing and Mobility
Vladimir Zadorozhny (University of Pittsburgh, USA) and Michael Lewis (University of Pittsburgh, USA)

Dynamic Content and Route Management in Wireless Networks
Sanjay Kumar Madria (Missouri Institute of Science and Technology, USA), Anirban Mondal (Xerox Research Center India, India), and Tridib Mukherjee (Xerox Research Center India, India)

INDUSTRIAL SESSIONS

Industrial Session 1: Applications of MDM
CityZen: A Cost-Effective City Management System with Incentive-driven Resident Engagement
Tridib Mukherjee, Deepthi Chander, Anirban Mondal, Koustuv Dasgupta, Amit Kumar, and Ashwin Venkat

ROADEYE: A System for Personalized Retrieval of Dynamic Road Conditions
Anirban Mondal, Avinash Sharma, Kuldeep Yadav, Abhishek Tripathi, Atul Singh, and Nischal Piratla

ScoDA: Cooperative Content Adaptation Framework for Mobile Browsing
Ayush Dubey, Pradipta De, Kuntal Dey, Sumit Mittal, Vikas Agarwal, Malolan Chetlur, and Sougata Mukherjea
Industrial Session 2: Location, Location, Location

Enabling Location-Based Services 2.0: Challenges and Opportunities
Saket Sathe, Roie Melamed, Peter Bak, and Shivkumar Kalyanaraman

Oscillation Resolution for Mobile Phone Cellular Tower Data to Enable Mobility Modelling
Wei Wu, Yue Wang, Joao Bartolo Gomes, Dang The Anh, James Decraene, Spiros Antonatos, Mingqiang Xue, Peng Yang, Ghim-Eng Yap, Xiaoli Li, Shonali Krishnaswamy, and Amy Shi-Nash

EnviS Tag, Scan, View: a Location-Based App for Visualizing SpatioTemporal Data from Sensor Cloud
Flora Dilys Salim, Mars Dela Pena, Yury Petrov, Nishant Sony, Bo Wu, and Abdelsalam Ahmed Saad

eHealth TABLET: A Developing Country Perspective in Managing the Development and Deployment of a Mobile – Cloud Electronic Medical Record for Local Government Units
Ma Regina Justina E. Estuar, Dennis Batangan, Andrei Coronel, Francisco Enrique Vicente Castro, Rose Ann Caliso, Christine Amarra, and John Paul Vergara

WORKSHOP SESSIONS

M-CROS WORKSHOPS

Session 1: Crowdsourcing/sensing in Mobile and Wireless Sensor Networks

Energy Efficient Resource Distribution for Mobile Wireless Sensor Networks
Mohamed M.Ali Mohamed, Ashfaq Khokhar, and Goce Trajcevski

A Negative Location-based Information Dissemination Method in Mobile Ad Hoc networks
Yuya Sasaki, Toshimitsu Fujii, Mitsuru Kaji, Takahiro Hara, and Shojiro Nishio
Towards Declarative Programming for Mobile Crowdsourcing: P2P Aspects  
Jurairat Phuttharak and Seng W. Loke

Session 2: Crowdsensing for Transportation and Smarter Cities Initiatives

Challenges in Crowdsourcing Real-time Information for Public Transportation  
Naveen Nandan, Andreas Pursche, and Xing Zhe

Exploring Location-Related Data on Smart Phones for Activity Inference  
Xiao-Wen Ruan, Shou-Chung Lee, and Wen-Chih Peng

edPAS: Event-based dynamic Parking Allocation System in Vehicular Networks  
Kshama Raichura and Nilesh Padhariya

HuMoComp WORKSHOPS

Understanding sustainable mobility: The potential of electric vehicles  
Michelle Scott, Debbie Hopkins, and Janet Stephenson

Skyline Travel Routes: Exploring Skyline for Trip Planning  
Wan-Ting Hsu, Wen-Chih Peng, and Ling-Yin Wei

Home and Work Place Prediction for Urban Planning Using Mobile Network Data  
Manoranjan Dash, Hai-Long Nguyen, Hong Cao, Ghim-Eng Yap, Minh Nhut Nguyen Xiaoli Li, Shonali Krishnaswamy, James Decraene, Spiros Antonatos, Yue Wang, Dang The Anh, and Amy Shi-Nash

Human Mobility Prediction and Unobstructed Route Planning in Public Transport Networks  
Shuo Shang, Danhuai Guo, Jiajun Liu, and Kuien Liu
PhD COLLOQUIUM

Information Enrichment for Tourist Spot Recommender System Using Location Aware Crowdsourcing
*Sunita Tiwari*

K-Anonymity Based On Fuzzy Spatio-Temporal Context
*Priti Jagwani*

Towards High Performance Spatio-temporal Data Management Systems
*Suprio Ray*

A Framework for Continuous Group Activity Recognition Using Mobile Devices: Concept and Experimentation
*Amin Bakhshandehabkenar*

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Demo Papers

ORange: Objective-Aware Range Query Refinement
*Abdullah Albarrak, Tatiana Noboa, Hina A. Khan, Mohamed A. Sharaf, Xiaofang Zhou, and Shazia Sadiq*

Real-Time QoS Monitoring for Cloud-Based Big Data Analytics Applications in Mobile Environments
*Khalid Alhamazani, Rajiv Ranjan, Prem Prakash Jayaraman, Karan Mitra, Meisong Wang, Zhiqiang George Huang, Lizhe Wang, and Fethi Rabhi*

Hybrid Queries over Symbolic and Spatial Trajectories: A Usage Scenario
*Maria Luisa Damiani, Hamza Issa, Ralf Hartmut Güting, and Fabio Valdes*

An Interactive Analytics Tool for Understanding Location Semantics and Mobility of Users Using Mobile Network Data
*Manoranjan Dash, Gim Guan Chua, Hai-Long Nguyen, Ghim-Eng Yap, Cao Hong, Xiaoli Li, Shonali Priyadarsini Krishnaswamy, James Decraene, and Amy Shi-Nash*
A Cross-media Music Retrieval System by Converting Color Changes into Tonal Changes
Yoshiyuki Kato and Shuichi Kurabayashi

RouteMiner: Mining Ship Routes from a Massive Maritime Trajectories
Yu-Ting Wen, Chien-Hsiang Lai, Po-Ruey Lei, and Wen-Chih Peng

SimMiner: A Tool for Discovering User Similarity by Mining Geospatial Trajectories
Naveen Nandan and David Sinjaya

HipStream: A Privacy-Preserving System for Managing Mobility Data Streams
Huayu Wu, Shili Xiang, Wee Siong Ng, Wei Wu, and Mingqiang Xue

A Demonstration of the NITOS BikesNet Framework
Giannis Kazdaridis, Donatos Stavropoulos, Stavros Ioannidis, Thanasis Korakis, Spyros Lalis, and Leandros Tassiulas

PopTour: Discovering Journey Group T-Patterns from Instagram Trajectories to Recommend Hot Travel Routes
Shuangyu Yu, Yaxin Yu, Yulong Li, and Xin Liu
DIRECTIONS

How to get to The University of Queensland from the Brisbane City

CityCat Ferry
A pleasant way to reach The University of Queensland from the city centre is via the Citycat ferry service (see CityCat videos). Ferries run from 5.30 am until 11.30 pm. Conference participants who board a Citycat ferry in the city centre (North Quay or Riverside stops) should choose a Citycat stop that indicates the direction of the University of Queensland (UQ). The trip from North Quay to UQ takes around 22 minutes.
Please see the map and the CityCat timetable.

An excerpt from the CityCat timetable, shown below, gives a few morning CityCat trips to The University of Queensland:

Board at North Quay 7:45  8:00  8:15  8:30
Arrive University of Queensland 8:02  8:22  8:37  8:52

Tickets can be bought on-board (cash needed) and timetables are also available on-board. The ticket price is $6.10 (if go-card is used then the tickets will be around 30% cheaper).

Other ways to get to UQ
Take bus 66 from King George Square or Roma Street in the City Centre to UQ Lakes or buses 411 and 412 from City to the UQ Main bus stop (Chancellor's Place station).
How to get to the conference dinner Kookaburra River Queen I Dinner Cruise from The University of Queensland

Direct journey from The University of Queensland ferry terminal St Lucia to Eagle Street Pier, arriving before 6.00pm on Wednesday 16 July 2014 by CityCat ferry. The total travel time is 41 minutes and the total walking distance is 256m. There are no transfers from boarding at The University of Queensland to arriving at Eagle Street Pier.

Time Travel details

Catch ferry NHAM UQ, to Riverside ferry terminal, City

5.15pm Depart from The University of Queensland ferry terminal, St Lucia
5.52pm Arrive at the Riverside ferry terminal, City
Travel time: about 37 minutes 5.52pm - 5.56pm

Walk 256m from the Riverside ferry terminal, City to Eagle Street Pier
5.56pm Arrive at Eagle Street Pier
Walking time: about 1 minute

Fare information
This is a 2 zone journey, travelling in zones 1 - 2. If you have the ticket type ‘go card adult’, the ticket price is $4.14. If you have the ticket type ‘Single paper adult’, the ticket price is $6.10 one way. Please inquire with the City Cat Ferry staff regarding return trips and return ticket price should you wish to purchase a return trip ticket.
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<th>Name</th>
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<tbody>
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<td>Andreas Konstantinidis</td>
<td>University of Cyprus, Cyprus</td>
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