



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), Vladimir 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 Jyväskylä, 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

CONFERENCE PROGRAM

Day 1 - Tuesday 15th July 2014

Time	Main Event	Parallel Event
8:00am - 6:30pm	Conference Secretariat & Registration (Location: HOLT ROOM)	
9:00am - 10:30am	Opening, Keynote1 - Bernhard Mitschang (Universität Stuttgart, Germany) Enterprise Apps and Mobile Data in Smart Factories (Location: ABEL SMITH Theatre)	
10:30am - 11:00am	Coffee/Tea Break - (Location: HOLT ROOM)	
11:00pm - 12:30pm	Research session 1 (90 mins) (ABEL SMITH Theatre)	
12:30pm - 1:30pm	Lunch - (Location: HOLT ROOM)	
1:30pm - 3:00pm	Research session 2 (90 mins) (Location: ABEL SMITH Theatre)	Advanced Seminar 1 (Location: SIR LLEW EDWARDS, ROOM 217)
3:00pm - 3:20pm	Coffee/Tea Break - (Location: HOLT ROOM)	
3:20pm - 5:00pm	Research session 3 (100 mins) (Location: ABEL SMITH Theatre)	Research session 4 (100 mins) (Location: SIR LLEW EDWARDS, ROOM 217)
5:00pm - 6:30pm	Demo (Location: SIR LLEW EDWARDS, ROOM 216 and Corridor outside 216 and 217)	
6:30pm Onwards	Conference Welcome Cocktail Reception – Location: Building 14 (TERRACE ROOM)	

Day 2 - Wednesday 16th July 2014

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

Day 3 - Thursday 17th July 2014

Time	Event	
8:00am - 6:30pm	Conference Secretariat & Registration (Location: HOLT ROOM)	
9:00am - 10:30am	Research session 8 (90 mins) (Location: ABEL SMITH Theatre)	Industrial Session1 (Location: SIR LLEW EDWARDS, ROOM 217)
10:30am - 11:00am	Coffee/Tea Break - (Location: HOLT ROOM)	
11:00am - 12:30pm	Research session 9 (90 mins) (Location: ABEL SMITH Theatre)	Industrial Session 2 (Location: SIR LLEW EDWARDS, ROOM 217)
12:30pm - 1:30pm	Lunch - (Location: HOLT ROOM)	
1:30pm - 3.00pm	Research session 10 (90 mins) (Location: ABEL SMITH Theatre)	Advanced Seminar 3 (Location: SIR LLEW EDWARDS, ROOM 217)
3:00pm - 3:30pm	Coffee/Tea Break - (Location: HOLT ROOM)	
3:30pm - 4:30pm	Keynote3 - 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)	
4:30pm	Conference Closing	

Day 4 - Friday 18th July 2014

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

KEYNOTES

Keynote1: *Bernhard Mitschang (Universität Stuttgart, Germany)*

Enterprise Apps and Mobile Data in Smart Factories

Session Chair: Daniela Nicklas, University of Bamberg

Keynote 2: *Tim Wark (CSIRO Computational Informatics, Australia)*

Future Challenges in Managing Mobile and Sensor Data in Industry-Driven Research

Session Chair: Arkady Zaslavsky, CSIRO Australia

Keynote 3: *Dik Lun Lee (Hong Kong University of Science and Technology, Hong Kong)*

Mobile Data Management: from Human-Human to Machine-Machine Communication

Session Chair: Arkady Zaslavsky, CSIRO Australia

RESEARCH SESSIONS

Research session 1: Query Processing (90 Mins)

Session Chair: Shonali Krishnaswamy, I2R Singapore

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

Jiping Wang, Kai Zheng, Hoyoung Jeung, Haozhou Wang, Bolong Zheng and Xiaofang Zhou

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)

Session Chair: Mohamed Sharaf, The University of Queensland

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 Grønbaek 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)

Session Chair: Sanjay Madria, Missouri University of Science and Technology

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)

Session Chair: Seng Loke, La Trobe University

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 Tassioulas

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)

Session Chair: Jadwiga Indulska, The University of Queensland

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)

Session Chair: Christian Becker, University of Mannheim

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)

Session Chair: Vladimir I. Zadorozhny, University of Pittsburgh

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)

Session Chair: Goce Trajcevski, Northwestern University

Distinguishing Electric Vehicles from Fossil-Fueled Vehicles with Mobile Sensing

Markus Wüstenberg, Henrik Blunck, Kaj Grønbaek 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)

Session Chair: Mario Nascimento, University of Alberta

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)

Session Chair: Bernhard Mitschang, University of Stuttgart

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

Dynamic Content and Route Management in Wireless Networks (Seminar 1)

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)

Fusing Information, Crowdsourcing and Mobility (Seminar 2)

Vladimir Zadorozhny (University of Pittsburgh, USA) and Michael Lewis (University of Pittsburgh, USA)

Semantic Trajectories and Beyond (Seminar 3)

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

INDUSTRIAL SESSIONS

Industrial Session 1: Applications of MDM

Session Chair: Seng Loke, La Trobe University

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

Session Chair: Anirban Mondal, Xerox Research Center India

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

Keynote: *Vladimir I. Zadorozhny (University of Pittsburgh, USA)*
Big Data Buzz and Opportunity

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

Demo Papers

ORange: Objective-Aware Range Query Refinement
Abdullah Albararak, 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

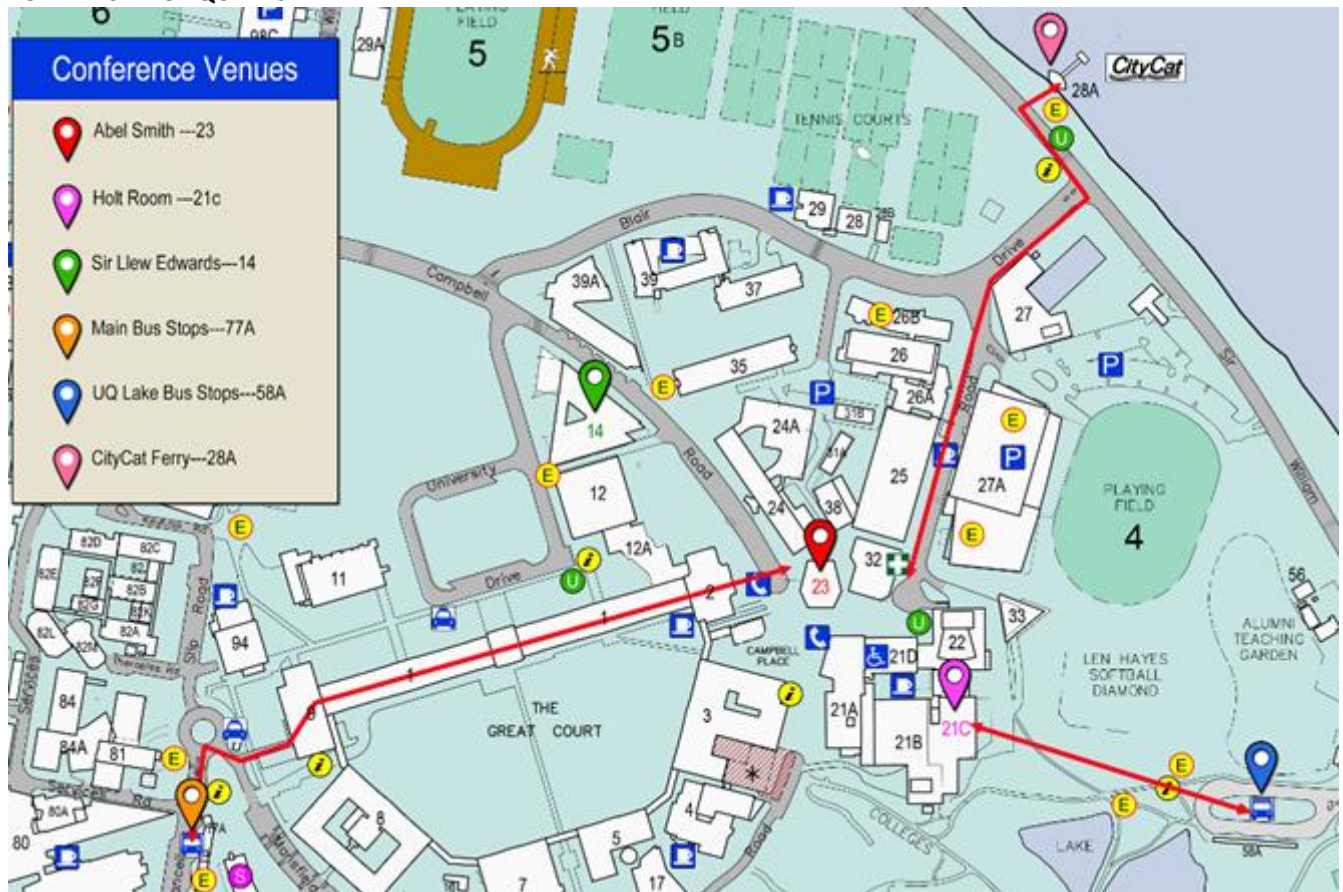
SimMiner: A Tool for Discovering User Similarity by Mining Geospatial Trajectories
Naveen Nandan and David Sinjaya

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 Tassioulas

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

THE UNIVERSITY OF QUEENSLAND MAP



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.

CONFERENCE ORGANISING COMMITTEE

General Chairs	 <p>Arkady Zaslavsky CSIRO, Australia</p>	PC Co-Chairs	 <p>Jadwiga Indulska The University of Queensland, Australia</p>
	 <p>Panos K. Chrysanthis University of Pittsburgh, USA</p>		 <p>Mohamed Mokbel University of Minnesota, USA</p>
	 <p>Christian Becker University of Mannheim, Germany</p>		 <p>Daniela Nicklas University of Bamberg, Germany</p>
Industrial Track Chairs:	 <p>Peizhao Hu NICTA, Australia</p>	Demonstrations Chairs:	 <p>Seng Loke LaTrobe University, Australia</p>
	 <p>Dipanjan Chakraborty IBM Research Labs, India</p>		 <p>Vladimir Zadorozhny University of Pittsburgh, USA</p>

<p>Panel Chairs:</p>	 <p>Shonali Krishnaswamy I2R, Singapore</p>	<p>Advanced Seminars Chairs:</p>	 <p>Mohamed Gaber University of Portsmouth, UK</p>
	 <p>Demetris Zeinalipour University of Cyprus, Cyprus</p>		 <p>Rui Zhang University of Melbourne, Australia</p>
<p>Doctoral Colloquium Chairs:</p>	 <p>Jari Veijalainen University of Jyvaskyla, Finland</p>	<p>Workshop Chairs:</p>	 <p>Claudia Roncancio University of Grenoble, France</p>
	 <p>Mohamed Sharaf The University of Queensland Australia</p>		 <p>Goce Trajcevski Northwestern University USA</p>
<p>Publicity Chairs:</p>	 <p>Nilanjan Banerjee IBM Research Labs, India</p>	<p>Proceedings Chair:</p>	 <p>Chi-Yin Chow City University of Hong Kong, HK</p>

	 <p>Andreas Konstantinidis University of Cyprus, Cyprus</p>	<p>Local Organising Chair:</p>	 <p>Prem Jayaraman CSIRO, Australia</p>
	 <p>Michael Sheng University of Adelaide, Australia</p>	<p>Webmaster:</p>	 <p>Karan Mitra Luleå University of Technology Sweden</p>
	 <p>Jingtao Wang University of Pittsburgh, USA</p>		 <p>Andreas Konstantinidis University of Cyprus, Cyprus</p>

CONFERENCE SECRETARIAT



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