



Program

Monday, 21 Nov 2011

9:00
10:00

- Registration
- Workshop Opening **VICE RECTOR JOHANNES FRÖHLICH, GEORG GARTNER**

Visualization and Communication

Chair: Georg Gartner

10:30–11:45
15 min slots

- Pedestrian Navigation with Augmented Reality, Voice and Digital Map: Results from a Field Study assessing Performance and User Experience **KARL REHRL, ELISABETH HÄUSLER, RENATE STEINMANN, SVEN LEITINGER, DANIEL BELL AND MICHAEL WEBER**
- Mobile Augmented Reality for Tourists - MARFT **PATRICK LULEY, ROLAND PERKO, JOHANNES WEINZEL, LUCAS PALETTA AND ALEXANDER ALMER**
- The SpaceBook Project: Pedestrian Exploration of the City Using Dialogue Based Interaction over Smartphones **WILLIAM MACKANESS, J. BOYE, S. CLARK, M. FREDRIKSSON, H. GEFFNER, O. LEMON, M. MINOCK AND B. WEBBER**
- What's up that street? Exploring streets using a Haptic GeoWand **RICKY JACOB, PETER MOONEY AND ADAM WINSTANLEY**
- Dynamic visualization of geospatial data on small screen mobile devices **FANGLI YING, PETER MOONEY, PADRAIG CORCORAN AND ADAM C. WINSTANLEY**

90 min break

Modelling

Chair: William Cartwright

13:15–14:40
15 min slots

- Using Context-aware Collaborative Filtering for POI Recommendation in Mobile Guides **HAOSHENG HUANG AND GEORG GARTNER**
- Personalized Relevance in Mobile Geographic Information Retrieval **CHANDAN KUMAR AND SUSANNE BOLL**
- I'm Feeling LoCo: A Location Based Context Aware Recommendation System **N. SAIPH SAVAGE, MACIEJ BARANSKI, NORMA ELVA CHAVEZ AND TOBIAS HÖLLERER**
- Spatial Data Computations in a Toolkit to Improve Accessibility for Mobile Applications **JANNE KOVANEN, PAUL KELLY, STUART FERGUSON, L. TIINA SARJAKOSKI AND TAPANI SARJAKOSKI**
- A Preference SQL Approach to Improve Context-Adaptive Location-Based Services for Outdoor Activities **FLORIAN WENZEL, MARTIN SOUTSCHEK AND WERNER KIESSLING**
- 5 min Showcase: Spatial Preferences for One-Step-Search in Location-Based Services **FLORIAN WENZEL, PAULUS SEBASTIAN AND WERNER KIESSLING 5 MINUTES**
- 5 min Showcase: OSMaTuner - A handy mobile editor helping to improve OSM data quality **SVEN LEITINGER, DANIEL PLATZER, HARALD RIESER AND KARL REHRL**

35 min break

🕒 15:15–16:25
10 min slots

- Routing for inexperienced drivers **JUKKA KRISP**
- On finding dissimilar route alternatives in road networks
STÉPHANIE VANHOVE AND VEERLE FACK
- Smart mobile devices for extracting real-time transit information
BASHIR SHALAIK, RICKY JACOB AND ADAM WINSTANLEY
- The user analysis of the understanding of space for the establishment of cartographic infrastructure for schematic navigation maps **KAREL STANEK AND LUCIE FRIEDMANNOVA**
- The Point Symbolology in Augmented Reality on Mobile Devices **LUKASZ HALIK**
- The Effects of Speed and Visual Emphasising on the Perception of Map Animations
SALLA MULTIMÄKI AND PAULA AHONEN-RAINIO
- Handheld Displays versus Paper Maps: Requirements of Outdoor Users Concerning Overview and Detailed View **MANFRED F. BUCHROITHNER AND CHRISTINE PREIWUSS**

☕ 20 min break

Modelling III

Chair: Gennady Andrienko

🕒 16:45–18:00
15 min slots

- Tracking movements with mobile phone billing data: a case study with publicly-available data **MATTHEW KWAN, WILLIAM CARTWRIGHT AND COLIN ARROWSMITH**
- Comparative analysis of urban areas through mobile phone data signatures: a case study in the Amsterdam metropolitan region **FILIPPO DAL FIORE, EURO BEINAT, PIET RIETVELD AND BARTOSZ HAWELKA**
- Integrated Spatiotemporal Analysis of Mass Events **CHRISTIAN E. MURPHY**
- Finding interesting places and characteristic patterns in spatio-temporal trajectories **UDO FEUERHAKE, COLIN KUNTZSCH AND MONIKA SESTER**
- Theoretical and Methodological Framework for Measuring Physical Co-presence with Mobile Positioning Databases **ERKI SALUVEER, SIIRI SILM AND REIN AHAS**

🍷 ice breaker party

Tuesday, 22 Nov 2011

Positioning I

Chair: Günther Retscher

🕒 9:00–10:30
15 min slots

- Discovering the Sensor Web through Mobile Applications **THEODOR FOERSTER, DANIEL NÜST, ARNE BRÖRING AND SIMON JIRKA**
- Positioning under Adverse Conditions using High Sensitivity GPS **KLEMEN KOZMUS TRAJKOVSKI, DUŠAN PETROVIČ, OSKAR STERLE AND BOJAN STOPAR**
- Adaptive Indoor Hybrid Positioning for LBS **LINYUAN XIA, DONGJIN WU, ESMOND MOK AND GUENTHER RETSCHER**
- Accuracy Requirements and Benchmarking Position Solutions for Intelligent Transport Location Based Services **SCOTT STEPHENSON, XIAOLIN MENG, TERRY MOORE, ANTHONY BAXENDALE AND TIM EDWARDS**
- Integrated Navigation Using Visual Odometry and IMU in the GPS-denied Environments **CHUN LIU, FAGEN ZHOU, YIWEI SUN, LIANBI YAO AND XIAOLIN MENG**
- Smartphone-Based Portable Pedestrian Indoor Navigation: Experiments on Visualization and Positioning **BEATE WENINGER, JOHANNES BOUCHAIN, CHRISTIAN LUKIANTO AND HARALD STERNBERG**

☕ 40 min break

Applications I

Chair: Jukka Krisp

🕒 11:10–12:25
15/10 min slots


- Investigation And Development Of Mobile Touristic Applications **EVA HAUTHAL AND DIRK BURGHARDT**
- Combining indoor and outdoor navigation: the current approach of route planners
ANN VANCLOOSTER AND PHILIPPE DE MAEYER

- LatYourLife: A Geo-Temporal Task Planning Application **AMIN ABDALLA**
- 10 min Development of a Traffic Incident Hotspot Data Acquisition System Based on Open-source GIS **HAO YE, XIAOLIN MENG, LEI YANG AND SUCHITH ANAND**
- 10 min Modeling of Physical Health Parameters Based on GIS and Sensor Integration **CHRISTIAN HESSING AND MANFRED F. BUCHROITHNER**
- 10 min Railway Alignment Optimization for Specified Travel Timesaving **JIAN YANG AND LIQIU MENG**

 75 min break

Positioning II & General Research on LBS

Chair: Barend Köbben


 13:40–15:10
10 min slots

- The Integrated Tracking System using GPS **PAVLA BARTOSOVA**
- About expert system for Wi-Fi access points **DMITRY NAMIOT AND MANFRED SNEPS-SNEPPE**
- Use of Smartphones for Tracking and Trip Recording **ESMOND MOK, GUENTHER RETSCHER, DONGGEN WANG AND LINYUAN XIA**
- A Novel Magnetic Indoor Positioning System for Indoor Location Services **JOERG BLANKENBACH, ABDELMOUMEN NORRDINE, HENDRIK HELLMERS AND EDUARD GASPARIAN**
- Towards the Development of Collaborative UWB-GPS In-Vehicular Navigation System in GPS-Challenged Environments **MOHD YAHYA, TERRY MOORE, CHRIS HIDE AND CHRIS HILL**
- The Impact of the Adoption of 3G Mobile Networks on the LBS Market in China **RUI SONG, XIAOLIN MENG AND SIMON MOSEY**
- Accessibility to essential services and facilities by a spatially dispersed aging population in suburban Melbourne, Australia **GANG-JUN LIU AND BENNO ENGELS**
- Current development of Android-based location-based system in Indonesia **R V HARI GINARDI**
- Context-Aware Geovisualisation: Utilising Place with Location Based Data **CHRIS MARMO, WILLIAM CARTWRIGHT AND JEREMY YUILLE**

 40 min break

Applications II

Chair: Theodor Förster

 15:50–17:10
10 min slots

- An Augmented Reality Framework for Architectural Applications **STEFAN NIEDERMAIR AND PETER FERSCHIN**
- A 3D Touristic Guide on Mobile Devices **JOSE MARIA NOGUERA, CARLOS JAVIER OGAYAR, RAFAEL JESUS SEGURA AND ANTONIO J. RUEDA**
- ITS Vienna Region, the Graph Integration Platform GIP and the new traffic service AnachB.at **HANS FIBY**
- i-Cadastre – A Prospective LBS-Tool for E-Government in Land Management? **GERHARD NAVRATIL, REINFRIED MANSBERGER AND GERHARD MUGGENHUBER**
- Mountain Guide 3 in 1 – Utilizing Cartography **KAREL KRIZ**
- Augmented reality and spatiality in tourism and regional development **JAKUB TROJAN AND LUKÁŠ ŠINOGL**
- GPS Tourist Multimedia Guide – Urban Sight-seeing Navigation System **PAVEL TUČEK, LUKÁŠ MAREK, VIT PASZTO, MICHAELA TUČKOVÁ, ONDŘEJ RŮŽIČKA, VIT VOŽENÍLEK AND NIKOLA SCHMIDT**
- SDImobile: Open Source Geo-Webservices for Mobile Data Capture in Cadastral Applications **ERVIN RAMONLLARI, BAREND KÖBBEN AND JAVIER MORALES**

Workshop Dinner

 19:30

Please consult your dinner voucher for details.

🕒 9:00–10:00
15 min slots

- EmoMap – Considering Emotional Responses to Space for Enhancing LBS
SILVIA KLETTNER, MANUELA SCHMIDT AND HAOSHENG HUANG
- A Mobile LBS for Geo-Content Generation Facilitating Users to Share, Rate and Access Information in a Novel Manner
HELMUT SCHROM-FEIERTAG, PATRICK LULEY AND LUCAS PALETTA
- Quality Assessment of Volunteered Geographical Data – A case-study with OpenStreetMap using evolution of features and contribution patterns
BŁAŻEJ CIEPŁUCH, PETER MOONEY AND ADAM WINSTANLEY
- Combining VGI with Viewsheds for Photo Tag Suggestion
BAREND KÖBBEN, OTTO HUISMAN AND HSIANGHSU LIN

☕ 30 min break

Web 2.0 & Privacy Issues

Chair: Haosheng Huang

🕒 10:30–11:30
15 min slots

- Using OSM for LBS – an analysis of changes to attributes of spatial objects
PETER MOONEY AND PADRAIG CORCORAN
- A Web Map for Emergency Information System: an Interface for Community-Based Emergency and Recovery Response in Merapi Volcanic Eruption 2010
TRIAS ADITYA AND AGUNG SUBROTO
- Adding Social Constraints to Location Based Services
GRANT MCKENZIE AND MARTIN RAUBAL
- Privacy Issues in Geospatial Visual Analytics
GENNADY ANDRIENKO AND NATALIA ANDRIENKO

🍷 farewell drinks



Lunch Suggestions

Lunch is not included. There are many food options in walking distance. Here are some recommendations:

- 1 Korfu (Greek), Wiedner Hauptstraße 4
- 2 Billa (supermarket)
- 3 Salon Wichtig (sandwiches & curry), Karlsgasse 22
- 4 Wiaz'haus (Austrian), Gußhausstraße 24
- 5 Asia Pavillion (Chinese), Favoritenstraße 1
- 6 Unglaublich (Austrian), Schleifmühlgasse 7
- 7 blueorange (bagels), Margaretenstrasse 9
- 8 Point of Sale (modern), Schleifmühlgasse 12
- 9 Gastwirtschaft (traditional Austrian), Rilkeplatz 7
- 10 Mensa of TU Vienna (cheap), Wiedner Hauptstraße 8–10, first floor
- 11 Mann (bakery)
- 12 Café Museum (traditional Viennese), Friedrichstraße 6

Please find your WiFi connection information on the back of your name badge.

Design by Manuela Schmidt and Felix Ortag
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KARTOGRAPHIE
Research Group Cartography

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