		Monday, 2 December 2013			
08:00	FH Techniki	REGISTRATION um Wien, Höchstädtplatz 5, 1200 Vien	nna, Austria		
09.00	CONFERENCE OPENING				
09:30	KEYNOTE I  Interoperability and Semantics – a reoccurring Issue?  Prof. Erich J. Neuhold  Room: HS F0.01				
10.30	COFFEE BREAK				
11:00	SESSION 1: Context Room: HS F4.03 Chair: Beniamino Di Martino	SESSION 2: Networking Room: HS F4.04 Chair: Ahmed Al-Dubai	SESSION 3: Security Room: HS F4.06 Chair: Toshikazu Nishimura		
	Analysis of a context-aware recommender system model for smart urban environment  Charles Gouin-Vallerand, Jesus Alberto-Montero De La Cruz Télé-Université du Québec Canada  Moving Beyond Weak Identifiers for Proxemic Interaction  Henrik Sørensen, Jesper Kjeldskov Aalborg University Denmark  Reactive Behaviors of Mobile Robots in a Museum Exhibit  Takashi Kiriyama, Tomohiro Akagawa, Taichi Inoue, Ayaka Yamamoto Tokyo University of the Arts Japan (Demo)	Channel estimation algorithms for MIMO-OFDM systems (LTE standard)  Abdelhamid Laraki, Driss El Ouadghiri, Abdellah Jamali My Ismail University-Meknes Hassan 1st University-Settat, Morocco  Improvement of QoS in IMS network using network coding Hamid Allouch, Mostafa Belkasmi University Mohamed V SUISSI, ENSIAS, Morocco  Dynamic Subcarrier-based Resource Allocation Algorithm in Wireless Networks Vitomir Seba, Borivoj Modlic, Gordan Sisul Faculty of Electrical Engineering and Computing, Croatia	Digital Identity based VoIP Authentication Mechanism  Andreas Plies, Michael Massoth Ingo Stengel Hochschule Darmstadt, University of Applied Sciences, Germany Plymouth University, UK  Mobile Call Authentication using Near Field Communication-based Smart Cards for Proof of Identity towards a Company Robin Acker, Andreas Plies, Michael Massoth, Ralf S. Mayer, Torsten Wiens Hochschule Darmstadt - University of Applied Sciences, Germany  Requirements for an Open Ecosystem for Embedded Tamper Resistant Hardware on Mobile Devices Michael Hölzl, René Mayrhofer, Michael Roland University of Applied Sciences Upper Austria, Austria (Demo)		
12:00		LUNCH			
13:00	SESSION 4: Context Room: HS F4.03 Chair name: Venet Osmani	SESSION 5: Networking Room: HS F4.04 Chair: Svetlana Boudko	SESSION 6: Security Room: HS F4.06 Chair: Amin Anjomshoaa		
	Implementation of Context-Aware Item Recommendation through MapReduce Data Aggregation Wolfgang Beer, Christian Derwein, Sandor Herramhof Software Competence Center Hagenberg, Austria Evntogram Labs GmbH, Austria	General all-Layers combined with Efficient WLAN MAC Layer Headers Compression David Levy, Ivan Kotuliak School of Computer Systems and Networks, Slovakia  A Combined Frequency	Enhancing security in mobile data networks through end user and core network cooperation  Martin Nagy, Ivan Kotuliak Slovak University of Technology, Slovakia  Range Face Segmentation: Face		
	A Generic Context-Based Architecture for Energy-Efficient Localization on Mobile Devices	Assignment and AP Scheduling for Throughput Maximization in IEEE 802.11 WLAN Babul Tewari, Sasthi Ghosh	Detection and Segmentation for Authentication in Mobile Device Range Images  Rainhard Dieter Findling, Fabian		

Wolfgang Narzt Johannes Kepler University, Austria

### Leveraging RF-channel fluctuation for activity recognition

Stephan Sigg, Shuyu Shi, Felix Büsching, Yusheng Ji, Lars Wolf TU Braunschweig, Germany National Institute of Informatics, Japan

### Image Recognition and Augmented Reality in Cultural Heritage Using OpenCV

Alba Amato, Salvatore Venticinque, Beniamino Di Martino Second University of Naples, Italy

#### Personalized Music Recommendation in a Mobile Environment

Claus Schabetsberger, Markus Schedl Johannes Kepler University, Austria (Demo)

### DroidFuzzer: Fuzzing the Android Apps with Intent-Filter Tag

Hui Ye, Shaoyin Cheng, Lanbo Zhang, Fan Jiang University of Science and Technology of China, China University of California, USA Indian Statistical Institute, India

#### Towards Standard M2M APIs for Cloud-based Telco Service Platforms

Asma Elmangoush, Adel Al-hezmi, Thomas Magedanz Technical University Berlin, Fraunhofer FOKUS- NGNI, Germany

### A Comparative Analysis of Flooding Time Synchronization Protocol and Recursive Time Synchronization Protocol

Danish Sattar, Tarek R. Sheltami, Ashraf S. Mahmoud, Elhadi M. Shakshuki

King Fahd University of Petroleum & Mineral, Saudi Arabia Acadia University, Canada

### Contextual Geospatial Picture Understanding, Management and Visualization

Stavros Christodoulakis, Michalis Foukarakis, Chrisa Tsinaraki, Lemonia Ragia, Eleni Kanellidi Technical University of Crete, Greece

### A Weight Based Clustering Scheme for Mobile Ad hoc Networks

Abdelhak Bentaleb, Saad Harous, Abdelhak Boubetra University of EI Bachir El Ibrahimi, Algeria United Arab Emirates University, UAE Wenny, Clemens Holzmann, Rene Mayrhofer University of Applied Sciences Upper Austria, Austria

# Integrated Wireless Authentication System: Sharing Satellite Communication among Multiple Organizations after Natural Disasters

Toshikazu Nishimura, Hitoshi Ogawa Ritsumeikan University, Japan

### Visualizations and Switching Mechanisms for Security Zones

Peter Riedl, Phillip Koller, Rene Mayrhofer, Andreas Möller, Marion Koelle, Matthias Kranz UAS Upper Austria, Campus Hagenberg, Austria Technische Universität München Universität Passau, Germany

### An Improved Reversible Data Hiding Scheme Based On Neighboring Pixel Differences

Dae-Soo Kim, Geum-Dal Park, Kee-Young Yoo Kyungpook National University, Korea

### 15:00 COFFEE BREAK

15:30

### SESSION 7: Context Room: HS F4.03 Chair: Wolfgang Beer

A System for Real-Time High-Level Geo-Information Extraction and Fusion for Geocoded Photos

Andrew Ennis, Liming Chen,
Christopher Nugent, George Ioannidis,
Alexandru Stan
University of Ulster, UK
IN2 Search Interfaces Development
Ltd, Germany

Monitoring activity of patients with bipolar disorder using smart phones

Venet Osmani, Alban Maxhuni, Agnes Grünerbl, Paul Lukowicz, Christian Haring, Oscar Mayora CREATE-NET, Italy DFKI, Germany

Primer Streamer: a System to Attract Users to Interests via Images on HMD

Naoya Isoyama, Tsutomu Terad, Masahiko Tsukamoto

### SESSION 8: Networking Room: HS F4.04 Chair: Shaharuddin Salleh

Network Selection for Multicast Groups in Heterogeneous Wireless Environments

Svetlana Boudko, Wolfgang Leister Norsk Regnesentral, Norway

### Multicast Multi-hop Routing for Wireless Mesh Community Networks

Ahmed Al-Dubai, Liang Zhao Edinburgh Napier University, United Kingdom Hitachi (China) Research & Development Corporation, China

A learning automata-based solution to the target coverage problem in wireless sensor networks

Shaharuddin Salleh, Sara Marouf Universiti Teknologi Malaysia, Malaysia

Application of ZigBee and RFID Technologies in Healthcare in

### SESSION 9: Security Room: HS F4.06 Chair: Delphine Christin

(Ab)using foreign VMs: Running Java Card Applets in non-Java Card Virtual Machines

Michael Roland, Josef Langer, René Mayrhofer NFC Research Lab Hagenberg, University of Applied Sciences Upper Austria

An Analysis Of Different Approaches To Gait Recognition Using Cell Phone Based Accelerometer

Muhammad Muaaz, Rene Mayrhofer University of Applied Sciences Upper Austria, Austria

### Fingerprint Verification Through Cloud Computing

Fazal Noor, Majed Alhaisoni University of Hail Saudi Arabia

Extended PIN Authentication

17:00	Van de Walle Multimedia Lab – ELIS Department, Ghent University Barco NV, Belgium	GROUP PHOTO	
	Kobe University, Japan  Automatic GEO-MASHUP generation of outdoor activities  Steven Verstockt, Viktor Slavkovikj, Pieterjan De Potter, Baptist Vandersmissen, Jürgen Slowack, Rik	Conjunction with the Internet of Things Nawaf Alharbe, Anthony Atkins, Akbar Sheikh Akbari Taibah University, Saudi Arabia Staffordshire University, United Kingdom	Scheme Allowing Multi-touch Key Input Tetsuji Takada, Yuki Kokubun The University of Electro- Communications, Japan

	Tuesday, 3 December 2013					
09:00	KEYNOTE II  Ameliorating Music Recommendation  Dr. Markus Schedl  KEYNOTE III  Mobile Mobility: The Road User Information Systems of the Future  DrIng. Stefan Schulte  Room: HS F4.22					
10:30		COFFEE BREAK				
11:00	SESSION 10: Location Room: HS F4.03 Chair: Christine Bauer	SESSION 11: Networking Room: HS F4.04 Chair: Rui Neves Madeira	SESSION 12: Apps Room: HS F4.06 Chair: Chrisa Tsinaraki			
	Relative Location Oriented Mobile LBS  Xiao Ruowei, Wu Zhanwei, Sugiura Kazunori Keio University, Japan Shanghai Jiaotong University, China  On the Probability Distribution of Speeds derived from Positioning Data obtained by Portable Positioning Devices Kyoung Woon On, Ha Yoon Song Hongik University, Korea  An indoor localization system within an IMS service infrastructure Paolo Addesso, Mario Di Mauro, Maurizio Longo, Giovanni Della Corte, Antonluca Robustelli Università degli Studi di Salerno Laboratorio Co.Ri.Tel. Ericsson Telecomunicazioni S.p.A., Italy	Measurement of Inter-Frequency Small Cell in Heterogeneous Networks  Hyung-Deug Bae, Jae-Wook Shin, Pyeong-Jung Song ETRI, Korea  Broadband Channel Inversion and Vector Perturbation for MU-MIMO System Under Frequency Selective Fading  Tetsuki Taniguchi, Yoshio Karasawa The University of Electro- Communications, Japan  Hash Bit Selection Using Markov Process for Approximate Nearest Neighbor Search Danchen Zhang, Xianglong Liu, Bo Lang Beihang University, China	Phone call translator system in real time  Yoko Iimura, Masahiro Oota, Shinya Tachimoto, Yu Kojo NTT DOCOMO, INC. Japan  A Mobile-based Multimedia System for Learning Japanese Mohamed Hamada, Takahiro Mitsui University of Aizu, Japan  A Left Turn Assist Application using Wireless Vehicle-to-Vehicle Communications at Unsignalized Intersections  Hyun-Soo Seo, Chang-Jin Lee, Hyo-Un Kim, Dong-Gyu Noh, Sang-Sun Lee Hanyang University LG Electronics Hyundai-Kia Motors, Korea			
12:00	LUNCH					
13:00	SESSION 13: Location Room: HS F4.03 Chair: Steven Verstockt	SESSION 14: Privacy Room: HS F4.04 Chair: Delphine Christin	SESSION 15: Apps Room: HS F4.06 Chair: Mirjam Augstein			

#### Cooperative Enhancement of Position Accuracy of Unmanned Aerial Vehicles

Helmut Hlavacs University of Vienna, Austria

On the (In-)Accuracy of GPS Measures of Smartphones: A Study of Running Tracking Applications

Christine Bauer Vienna University of Economics and Business, Austria

### Autonomous Flight using a Smartphone as On-Board Processing Unit in GPS-Denied Environments

Michael Leichtfried, Christoph Kaltenriner, Annette Mossel, Hannes Kaufmann

Interactive Media Systems, Vienna University of Technology, Austria

#### Efficient Monitoring of Moving Mobile Device Range Queries using Dynamic Safe Regions

Haidar AL-Khalidi, David Taniar, John Betts, Sultan Alamri Monash University, Australia

### Probabilistic Inference of Multi-Object Trajectories

Pengcheng Wang Shanghai Jiao Tong University, China

### Can Smartphone Users Turn Off Tracking Service Settings?

Veelasha Moonsamy, Lynn Batten, Malcolm Shore Deakin University NBN Co., Australia

### An Approach for Dynamic Personal Monitoring based on Mobile Complex Event Processing

Yongchun Xu, Nenad Stojanovic, Ljiljana Stojanovic, Dusan Kostic FZI Research Center for Information Technology, FZI at the University of Karlsruhe, FZI Kalrsruhe, NissaTech, Germany, Serbia

### Improving reversible histogram based data hiding schemes with an image preprocessing method

Mehdi Fallahpour, David Megias, Mohammad Ghanbari Universitat Oberta de Catalunya, Spain University of Essex, UK

### Hacking the Gestures of Past for Future Interactions

Atılım Şahin Istanbul Technical University, Turkey

Raising User Awareness about Privacy Threats in Participatory Sensing Applications through Graphical Warnings

Delphine Christin, Martin Michalak, Matthias Hollick TU Darmstadt, Germany

### Theatre Engine: Integrating mobile devices with live theater

Charles B. Owen, Alison Dobbins, Lisa Rebenitsch Michigan State University, USA

## Assessing the User Experience Design as a Persuasive Methodology in a Real World Sport Application

Paolo Pilloni, Fabrizio Mulas, Luisella Piredda, Salvatore Carta University of Cagliari Everywhere Sport srl Italy

### MoM-NOCS: Management of Mobile Multimedia Nature Observations using Crowd Sourcing

Chrisa Tsinaraki, Giannis Skevakis, Ioanna Trochatou, Stavros Christodoulak Technical University of Crete, Greece

### Music homogeneity analysis through instantaneous frequencies

Tatiana Endrjukaite, Yasushi Kiyoki Keio University, Japan

#### Designing Seamless Mobile Augmented Reality Location Based Game Interfaces

Mark Lochrie, Klen Copic Pucihar, Adrian Gradinar, Paul Coulto Lancaster University, United Kingdom

### 15:00 COFFEE BREAK

### 15:30 SESSION 16: Audio and Video Room: HS F4.03 Chair: Yoo-Sung Kim

An HTML5 Player for Interactive Non-linear Video with Time-based Collaborative Annotations

Britta Meixner, Harald Kosch, Beate Siegel, Peter Schultes, Franz Lehner University of Passau, Germany

Large-scale Structure-from-Motion Reconstruction with small memory consumption

Guoyu Lu, Vincent Ly, Chandra Kambhamettu University of Delaware, USA

A Semi-Automatic Video Annotation Tool to Generate Ground Truth for Intelligent Video Surveillance Systems

Joosung Kim, Ryu-Hyeok Gwon, Jin-Tak Park, Hakil Kim, Yoo-Sung Kim Inha University, Korea

### SESSION 17: Assistive Health Room: HS F4.04 Chair: Annette Mossel

A User Modelling Wizard for People with Motor Impairments

Werner Kurschl, Mirjam Augstein, Holger Stitz, Peter Heumader, Claudia Pointner

University of Applied Sciences Upper Johannes Kepler University, Austria

### Building on Mobile towards Better Stuttering Awareness to Improve Speech Therapy

Rui Neves Madeira, Patrícia Macedo, Pedro Pita, Íris Bonança, Helena Germano

Escola Superior de Tecnologia de Setúbal Instituto Politécnico de Setúbal, Portugal

### Using Planning with Action Preference in Story Generation

Xiaobo Li, Jiao Wu, Samiullah Paracha, Osamu Yoshie

#### SESSION 18: Learning Room: HS F4.06 Chair: Aleksandar Karadimce

Mobile Education – Effective Integration of new mobile technologies into existing learning systems using MISA Method

Ouiame Filali Marzouki, Mohammed Khalidi Idrissi, Samir Bennani Ecole Mohammadia d'ingénieurs, Morocco

An Adaptive and Book-Oriented Mobile Touch Screen User Interface Concept for Novice Senior Users

Michael Hölzl, Christoph Schaffer University of Applied Sciences Upper Austria, Austria

A Framework for Instantiating Native Mobile Multimedia Learning Applications on Android Platform

Kiemute Ovibo, Mohamed Hamada

### Extraction of Pinna Features for Customized Binaural Audio Delivery on Mobile Devices

Simone Spagnol, Michele Geronazzo, Davide Rocchesso. Federico Avanzini University of Padova Iuav University of Venice Italy Waseda University, Japan

SRE: A Scenario-based Requirement Exploration Process for End-user Mobile-Application Development

Khoi-Nguyen Tran, Hong-Quang Nguyen International University, Vietnam African University of Science and Technology, Nigeria University of Aizu, Japan

Model for interactive, collaborative and multimedia mobile learning environment

Danco Davcev, Aleksandar Karadimce University Sts Cyril and Methodius, Macedonia

18:30 – 22:30

#### CONFERENCE GALA DINNER

Palais Niederösterreich, Herrengasse 13, 1010 Vienna

### Wednesday, 4 December 2013

9:00

SESSION 19: Audio and Video
Room: HS F4.03
Chair: Mark Lochrie

Dynamic Compressive Tracking
Ting Chen, Yanning Zhang, Tao Yang,
Hichem Sahli
Northwestern Polytechnical University,

Instantaneous Video Quality Assessment for lightweight devices

China.

Vrije Universiteit Brussel, Belgium

Antonio Liotta, Decebal Constantin Mocanu, Vlado Menkovski, Luciana Cagnetta, Georgios Exarchakos Eindhoven University of Technology, Netherlands University of Modena, Italy

Dynamic Database Creation for Speaker Recognition System

Bhushan Patil, Yogesh Manav, Pavan Sudheendra Samsung R&D Institute India India

Gender Recognition Based On Combining Facial and Hair Features

Chien-Cheng Lee, Chung-Shun Wie Yuan Ze University, Taiwan SESSION 20: Networking Room: HS F4.04 Chair: Michael Roland

Simulation and Evaluation of the Interference Models for RFID Reader-to-Reader Collisions

Linchao Zhang, Renato Ferrero, Filippo Gandino, Maurizio Rebaudengo Politecnico di Torino, Italy

Honeypot Framework for Wireless Sensor Networks

Jürgen Markert, Michael Massoth Plymouth University, UK Hochschule Darmstadt, Germany

Web-safe Fonts for Deviceindependent Mobile Web Applications

Jacek Chmielewski Poznan University of Economics, Poland

Efficient Approximation Algorithm for Data Retrieval with Conflicts in Wireless Networks

Ping He, Hong Shen, Hui Tian Beijing Jiaotong University, China SESSION 21: Apps Room: HS F4.06 Chair: Charles B. Owen

Energy-efficient Passive Replication of a Process in Mobile Environment

Dilawaer Doulikun, Ailixier
Aikebaier, Tomoya Enokido, Leonard
Barolli, Makoto Takizawa
Hosei University
NICT
Rissho University
Fukuoka Institute of Technology
Japan

A Method for Mobile Download Conversion Rate Measurement based on Device Fingerprinting

Alexander Schuch, Clemens Holzmann, Florian Lettner University of Applied Sciences Upper Austria, Austria

Energy-Aware Adaptation of Educational Multimedia in Mobile Learning

Syed Jalal University of Southampton United Kingdom

A Data Mashup Engine for Smartphones Based on XProc

Harald Hofstätter, Amin Anjomshoaa, A Min Tjoa Vienna University of Technology, Austria

13:00	CLOSING KEYNOTE New Technologies: We have seen nothing yet Prof. Hermann Maurer	
12:00	LUNCH	
11:00		
10:30	COFFEE BREAK	

	Room: HS F0.01
14:00 – 14:30	CLOSING & BEST PAPER AWARD/JOURNAL SELECTION

#### **Presentation Guidelines**

- 1. All presenters of oral presentations must report to the session chair in advance of each session.
- 2. Presenters can either use the laptop provided in each room (PC) or connect their own laptop to the projector. If you are bringing your own computer to connect to the projector: a VGA cable with male connector will be provided for hooking up your laptop. Most computers require an adapter that varies by brand (Mac/PC) and even by model. Please ensure you bring the proper adapter that will fit your computer (no adapters will be available on site). It would be a good idea to arrive at the room 20 minutes early to test connecting your computer to the projector, so as not to delay the presentation during the actual session.
- 3. If using the conference-provided laptop, presentations should be uploaded USB flash drive/pen drive during the break before the beginning of the sessions at the latest. Only Power Point presentations (.ppt/.pptx) and Adobe Acrobat files (.pdf) will be accepted, as the available software includes Microsoft Office and Adobe Acrobat Reader. If you have a video or audio file embedded in the presentation we recommend using a standard video and audio codec compatible with Microsoft PowerPoint.
- 4. Presentation time is critical; each FULL paper is allocated 25 minutes for presentation. This time includes setup and questions. We recommend that presentation of your slides should take about 20 minutes, leaving 5 minutes for setup, introduction, summary, and questions from the audience.
- 5. Each SHORT paper or DEMOSTRATION is allocated 20 minutes for presentation. This time includes setup and questions. We recommend that presentation of your slides should take about 15 minutes, leaving 5 minutes for setup, introduction, summary, and questions from the audience.