TENTATIVE AGENDA

Wednesday, October 27th – Workshop Day

Workshop on Personal and Institutional Security

As more and more mobile computing environments are deployed, as more of us carry with us evermore powerful digital devices capable of high speed communications, fast computations and huge storage, the landscape of physical as well as data vulnerability is changing rapidly, having far reaching implications to personal as well as institutional security. The goal of this workshop is to explore the new challenges to security posed by the environments of tomorrow.

In a mobile environment a person has the flexibility of working from any location and even conducting business while one is on the move. However, a loss of a device or other compromise to one's physical security may not only cause physical harm but may also permit ready access to the digital devices threatening the security of personal or financial data as well as possible access to the institutional systems. By recognizing these security needs, we may design systems which support secure operations while improving personal and institutional security. For example, by incorporating localization technologies in digital devices we may track the location of the device/person carrying it, thereby improving the physical security. Of course, the collection of the location information has to be done carefully so that the personal freedom and privacy concerns of the individual are not jeopardized. Location information can also be used to improve the institutional security by having location as another important factor to take into account as a part of the overall security architecture and policies.

In this workshop several experts will present their points of view on the subject. The goal will be to identify the areas requiring further attention in support of personal and institutional security.

Participant will be given the opportunity to present a short position statement followed by discussion and the production of a white paper covering the applications and needs for personal and institutional security. You may prepare up to 5 slides and expect up to 10 minutes for your position statement, to be presented after the main presenters and before discussion.

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THIRD INTERNATIONAL CONFERENCE ON
MOBILE AND UBIQUITOUS MULTIMEDIA (MUM2004)
College Park, Maryland, U.S.A. October 27 – 29, 2004

Presenters

Ashok Agrawala – *University of Maryland*
Why Conventional Security Techniques Are Not Sufficient for MUM Environments?
　　　　Jon Agre – *Fujitsu Laboratories of America*
Kirstie Bellman – *Aerospace Corporation*
John Rodgers – *University of Maryland*
Anne Tsao - *Algotek Inc.*
Tony Fescenda – *Koolspan*

Thursday, October 28th – Main Conference

8:30 am Welcome

9:00-10:30 *Applications*

bYOB (Build Your Own Bag): A Computationally-Enhanced Modular Textile System, Gauri Nanda, Adrian Cable, Moneta Ho, Han Hoang, *Massachusetts Institute of Technology*

Alternate Feature Location for Rapid Navigation Using a 3D Map on a Mobile Device, Maximino Bessa**,** António Coelho*, University of Trás-os-Montes e Alto Dou;*Alan Chalmers**,** *University of Bristol*

Exploring the Potentials of Combining Photo Annotating Tasks with Instant Messaging Fun,Yuechen Qian, Loe M.G. Feijs*, Eindhoven University of Technology*

Pocket PhotoMesa: A Zoomable Image Browser for PDAs, Amir Khella, Benjamin B. Bederson*, University of Maryland*

10:30-11:00 **Break**

11:00-12:30 *Gaming and Graphics*

Enabling Fast and Effortless Customisation in Accelerometer Based Gesture Interaction, Jani Mäntyjärvi, Juha Kela, Panu Korpipää, and Sanna Kallio, *VTT Electronics*

The Road Rager - Making Use of Traffic Encounters in a Mobile Multiplayer Game, Liselott Brunnberg, *Interactive Institute*

UMAR - Ubiquitous Mobile Augmented Reality, A. Henrysson and M. Ollila, *Linkoping University Sweden*

The GapiDraw Platform: High-Performance Cross-Platform Graphics on Mobile Devices, Johan Sanneblad and Lars Erik Holmquist, *Viktoria Institute Horselgangen*

12:30-2:00 Lunch

Keynote Talk:

**STORY: Extracting stories from heterogeneous information sources
and delivering them to heterogeneous devices**
VS. Subrahmanian*, University of Maryland, College Park*

2:30-3:30 *Software and Architectures*

Middleware Design Issues for Mobile and Ubiquitous Computing,
Tatsuo Nakajima, Kaori Fujinami, Eiji Tokunaga, Hiroo Ishikawa, *Waseda University*

**Plug-and-Play Application Protocol as the Next Step in the Peer-to-Peer
Evolution,** Erkki Harjula, Mika Ylianttila, Jussi Ala-Kurikka, Jaakko Sauvola
MediaTeam Oulu Group; Jukka Riekki, *University of Oulu*

Survey on Requirements and Solutions of Ubiquitous Software,
Eila Niemelä and Juhani Latvakoski, *VTT Technical Research Centre of Finland*

3:30-4:30 **Break**

4:00-4:30
Poster and Demo Overviews

4:30-6:00
Posters and Demos

6:00   Tour of College Park Museum

7:30   Conference Dinner – 94th Aero Squadron

Friday, October 29th

8:30-10:00 *Context Awareness*

Utilizing Context-Awareness in Office-Type Working Life
Marika Tähti, Ville-Mikko Rautio, Leena Arhippainen, *University of Oulu*

Towards Connectivity Management Adaptability: Context Awareness in Policy Representation and End-to-end Evaluation Algorithm
Jun-Zhao Sun, Jukka Riekki, Jaakko Sauvola, and Marko Jurmu, *University of Oulu*

Usage Patterns of FriendZone – Mobile Location-Based Community Services
Asaf Burak, *Carnegie Mellon*; Taly Sharon, *Massachusetts Institute of Technology*

10:00-10:30 **Break**

11:00 – 12:30 *Media Analysis*

Fast Watermark Detection Scheme for Camera equipped Cellular Phone, Takao Nakamura, Atsushi Katayama,
Masashi Yamamuro, Noboru Soneharay*, National Institute of Informatics*

New High-speed Frame Detection Method: Side Trace Algorithm (STA) for i-appli on Cellular Phones to Detect Watermarks,
Atsushi Katayama, Takao Nakamura , Masashi Yamamuro,
NTT Cyber Space Laboratories; Noboru Sonehara,
National Institute of Informatics

Automatic Video Production of Lectures Using an Intelligent and Aware Environment, Michael Bianchi, *Foveal Systems*

A Novel Video Coding Scheme for Mobile Devices,
Yi Wang, Houqiang Li, *University of Science & Technology of China*;
Chang Wen Chen, *Florida Institute of Technology*

12:30-2:00 Lunch
   Keynote Speaker: **Prof. Brad Myers***,* **Mobile Devices for Control of Ubiquitous Multimedia, Carnegie** *Mellon University*

2:00-3:30 *Personalization*

Utilising Context Ontology in Mobile Device Application Personalisation, Panu Korpipää, Juha Kela, VTT Electronics; Jonna Häkkilä, Sami Ronkainen, Ilkka Känsälä, *Nokia Corporation*

Design and Evaluation of mProducer: a Mobile Authoring Tool for Personal Experience Computing, James Chao-Ming Teng, Chon-In Wu, Yi-Chao Chen, Hao-hua Chu, Jane Yung-jen Hsu, *National Taiwan University*

Mobile Kärpät – A Case Study in Wireless Personal Area Networking, Timo Ojala, Jani Korhonen, Tiia Sutinen, Pekka Parhi and Lauri Aalto, *University of Oulu*

Configuring Gestures as Expressive Interactions to Navigate Multimedia Recordings from Visits on Multiple Projections, Giulio Jacucci, *University of Oulu;* Juha Kela, Johan Plomp, *VTT Electro*

Saturday, October 30th

Tailgate party and American College Football

University of Maryland vs Flordia State

Poster Presentations

IP Network for Emegency Services, K.K.A. Zahid, L. Jun, K. Kazaura, and M. Matsumoto, *Waseda University*

Mobile Multimedia Services Development, J. Karvonen and J. Warsta, *University of Oulu*

User Experiences on Multimedia Messaging Services Enabled Location Based Application Functionality, J. Hakkila, *Nokia Corp.,* and J. Mantyjarvi, *VTT Electronics*

Digital Rights Management & Protecting the Digital Media Value Chain, M.L. Smith, *HumanCentric Technologies, Inc.*

Bandwidth Optimization by Reliable-Path Determination in Mobile Ad-Hoc Networks, S. Raghavan, S. Akkiraju and S. Sridhar, *Anna University*

atMOS: Self Expression Movie Generating System for 3G Mobile Communication, S. Tokuhisa, T. Kotabe and M. Inakage, *Keio University*

The Challenges of Wireless and Mobile Technologies – The RFID Encourages the Mobile Phone Development, T. Hori and M. Matsumoto, *Waseda University*

Context-Aware Middleware for Mobile Multimedia Applications, O. Davidyuk, J. Riekki, V.M. Rautio and J. Sun, *University of Oulu*

Milddleware Support for Implementing Context-Aware Multimodal User Interfaces, P. Repo and J. Riekki, *Infotech Oulu*

An Efficient Method for Mutiple Compressed Audio Streams Spatialization, A. B. Touimi, M. Emerit, *France Telecom*, and J.-M. Pernaux, *ASSYSTEM Services*

Digital Photo Similarity Analysis in Frequency Domain and Photo Album Compression, Y. Lu, T-T. Wong and P.-A. Heng, *The Chinese University of Hong Kong*

Multiple Embedding Using Robust Watermarks for Wireless Medical Images, D. Osborne, D. Abbott, M. Sorrell and D. Rogers, *The University of Adelaide*

Mutlimodal Interfaces in Wireless Computing, J. Cohen, M. Genser, *CTO Voice Signal* (No paper submission)

Task Computing, Z. Song, R. Masuoka, Y. Labrou, *Fujitsu Laboratories of America, Inc.*

Data Gathering in Sensor Networks, K.V. Natarjan, M.V.V. Murthy, *Anna University* (No paper submission)

Ambient Utility Games – New Motivators in developing game genres, S. Kangas, *Technical Research Centre of Finland*, and O. Caven-Pysa, *Lappeenranta University of Technology* (No paper submission)

Wohemia: A Location-Based Story and Scavenger Hunt for internet-Capable Mobile Devices, S. Nikkel, *Wohemia* (No paper submission)