HIMoA 2011
Workshop on Managing Health Information in Mobile Applications

– Call for Papers –

A growing number of citizens desire to be empowered with applications for healthcare. Personalised and mobile healthcare is a fast growing trend to improve healthcare outcomes in daily life. Managing health information of mobile users is a crucial issue for the success of electronic healthcare applications.

To support customers in daily life, mobile healthcare systems collect extraordinarily personal and private information about the state of their users. The sensors of monitoring applications deliver a huge amount of data in continuous streams, sometimes collected in always-on mode of 24/7 measuring relevant parameters. The user as the owner of the information, and also other stakeholders who are potentially in contact with the data, are not able to process the data by hand. Automatic filtering, analysis, mining and reasoning is necessary. If the mobile technology used is not suitable, then systems rely on server-based treatment of data, asking for high-speed networks and always-on connections. Filtering algorithms try to reduce the data volume before transmission or permanent storage on the mobile or other devices. Fusing mechanisms are responsible to combine information from heterogeneous sources and deduce reasonable knowledge. Expert systems try to match the data with previous or predefined knowledge and propose activities to prevent or recover health.

Failure to discover relevant events, misinterpretation, reasoning errors, or flawed filtering have a high risk of causing harmful effects to the person's health. The workshop therefore aims to provide a forum for researchers and practitioners to present, share and discuss insights, advances and challenges related to discovery, representation, storage and application of relevant health information to support well-being in daily life of mobile users. The goal is to develop technologies and mechanisms to support the integration, merging, evolution, and matching of complex data and data models to support the management of complex, integrated, distributed, and heterogeneous healthcare systems.

The workshop is held in conjunction with the 12th International Conference on Mobile Data Management (MDM2011, 6-9 June, 2011, Luleå, Sweden). Publication of accepted workshop papers will be through IEEE Computer Society attached to the main conference proceedings.

The list of topics includes but is not limited to:

- Sensing and acquisition of health data
- Data models and model management for health information
- Data integration, fusion, and mining of health data
- Data sharing and interoperability in mobile health applications
- Data stream processing and management of health data
- Data stream mining of health data
- Real-time data processing in mobile health applications
- Data and workflow management in health applications
- Managing data intensive mobile health applications
- Persistent storage and personal health records
- Knowledge representation and reasoning in mobile health applications
- Expert-systems for mobile health applications
- Knowledge application in mobile health applications
- Standards for mobile health applications
- Privacy and security in mobile health applications

Workshop Organizers

- Andreas Lorenz, UMIC Research Center, RWTH Aachen University, Germany
- Christoph Quix, Information Systems, RWTH Aachen University, Germany
- Sandra Geisler, Information Systems, RWTH Aachen University, Germany

Program Committee

- Yuan An, Drexel University, USA
- Wolfgang Deiters, Fraunhofer ISST, Germany
- George Demiris, University of Washington, USA
- Benedikt Fischer, Medical Informatics, RWTH Aachen University, Germany
- Gijs Geleijnse, Philips Research, The Netherlands
- Elena Ikonomovska, Jozef Stefan Institute, Slovenia
- Xiang Li, Information Systems, RWTH Aachen University, Germany
- Julie Maitland, National Research Council, Canada
- Oscar Mayora, CREATE-NET, Italy
- Jochen Meyer, OFFIS, Germany
- Dan Morris, Microsoft Research, USA
- Claudia Plant, Florida State University, USA
- Carsten Röcker, Human Technology Centre, RWTH Aachen University, Germany
- Stefan Schiffer, Knowledge-Based Systems Group, RWTH Aachen University, Germany
- Cord Spreckelsen, Medical Informatics, RWTH Aachen University, Germany
- Jari Veijalainen, University of Jyväskylä, Finland

Important Dates

- Deadline for Workshop Papers: February 15, 2011
- Notification of Workshop Papers: March 15, 2011
- Deadline for Camera Ready Papers: March 25, 2011
- Workshop Date: June 6, 2011

Submission Guidelines

The page limits for accepted regular workshop papers are 6 pages, including all figures, tables, and references, and 3 pages for short papers. Papers must be in IEEE camera-ready format. Templates can be found at http://www.ieee.org/conferences_events/conferences/publishing/templates.html.

Submissions in PDF are to be uploaded to the workshop's submission site
http://www.dbis.rwth-aachen.de/HIMoA2011/submission.shtml

Website

http://www.dbis.rwth-aachen.de/HIMoA2011

Contact

himoa2011@dbis.rwth-aachen.de