

31st COMPSAC Final Workshop Proposal

The First IEEE International Workshop on Engineering Mobile-Based Software and Applications (EMOBS07) in cooperation with

31th Annual International Computer Software and Applications Conference (COMPSAC2007)

Beijing, China, July 24-27, 2007

Workshop Duration: One Day Workshop with four sessions of 90-minutes each

URL: <http://conferences.computer.org/compsac/2007/EMOBS07>

Theme of the workshop:

The wide deployment of wireless networks and mobile technologies and significant increase of the number of mobile device users have created a very strong demand on various wireless-based mobile-based software application systems and enabling technologies. This provides many new business opportunities and challenges to wireless and networking service providers, mobile technology vendors, content providers and solution integrators. Living in a wireless world changes and enhances people's life in many areas, such as mobile communications, wireless information sharing and learning, m-commerce, home environment, and entertainment. Today, business organizations and government agencies face with new pressure for technology update in network infrastructures and enterprise solutions to support wireless connectivity and mobility. To meet the increasing demand on various reliable wireless-based software application systems, business people are looking for innovative ideas to create diverse mobile-commerce applications and service systems, and engineers are looking for cost-effective engineering methods and efficient solutions to build high-quality wireless-based software and application systems. Therefore, today studying and solving technical issues in engineering wireless-based software and application systems is becoming a hot research subject for academic researchers and the industry community. The major **theme of this workshop** is engineering high-quality mobile-based application systems to support mobile users anywhere at anytime.

Goals of the workshop:

The International Workshop on Engineering Mobile-Based Systems and Applications (E-MOBILES) is the forum to bring together researchers, scientists, software architects, and industry professionals for discussing innovative ideas and engineering solutions to construct high-quality wireless-based software systems and applications. Using this forum, researchers and industrial professionals can exchange issues, challenges, and new ideas and solutions. Authors are invited to submit original and research papers addressing engineering issues, challenges, solutions, and technologies in building wireless-based software systems and applications. All submissions will be peer-reviewed by the members of the international program committee. Accepted paper will be included in the COMPSAC 2007 workshop proceedings (EI-Index) published by IEEE Computer Society Press.

Topics of interest include but are not limited to the following:

Engineering topics:

- System requirements engineering issues and methods for mobile-based system requirements analysis
- Wireless-based system infrastructures, architectures, and service-oriented architectures
- Design modeling, design patterns, and design issues and solutions in wireless-based systems
- Mobile data transaction models, retrieval solutions, and caching and migration techniques
- Analysis, design, and testing for system mobility, interoperability, performance, scalability and reliability
- Wireless system and application security, and mobile user privacy
- Mobile client design for mobile user experience, personalization, customization, and interoperation
- Testing methods, test models, coverage criteria, and tools
- Performance validation techniques and metrics, evaluation models and processes, measurement tools and environments

Enable technology and solution topics:

- Mobile database technologies and mobile data transaction services
- Semantic web for Mobile Commerce
- Location detection and discovery mid-ware and technologies
- Wireless multimedia technologies, platforms, and solutions for wireless applications
- Mobile platforms for client applications on mobile devices (J2ME, Symbian, etc.)
- Middleware and agent technologies for mobile commerce and wireless service systems
- Mobile service frameworks, mobile agent technologies and solutions

Applications, services, and experience topics:

- Ubiquitous and pervasive computing systems
- Novel m-commerce applications and services
- Mobile portals and mobile search engines
- Enterprise-based mobile applications and systems
- Wireless advertising applications, services, and systems
- Location and context-aware mobile commerce applications and services
- Service platforms for mobile commerce (mobile web enterprise)
- RFID enabled application systems
- 2D Barcode based mobile application systems
- Mobile payment protocols, service systems, and platforms
- Case-study, lesson learned and experience reporting

Likely participants:

The workshop aims at attracting both researchers from academic and industrial institutions and practitioners from industry. The subject of this workshop is becoming a hot research topic. We expect to receive 30-40 submissions, and accept 12-16 papers. This predication is based on based on our experience in organizing workshops the second and third IEEE international workshop on Mobile Commerce and Service (WMCS05, WMCS06). In WMCS2005, we received 80 submissions, and accept 25 papers, and in WMCS2006, we received 20 submissions, and accepted 10 papers. Therefore, we expect to have about 30-40 attendees.

Important Date:

Dec. 08, 2006: Preliminary Workshop Proposal submission
Dec. 15, 2006: Feedback provided to the workshop proposals
Dec. 31, 2006: Final workshop proposal submission
Feb. 23, 2007: Full paper and short paper due
Mar. 30, 2007: Decision notification (electronic)
Apr. 30, 2007: Camera-ready copy and author registration due

Workshop Format:

The workshop will consist of four sessions, each 90 minutes of duration. The first session will start with a welcome and an introduction to the general topics of the workshop. This session will also include an overview of the presentations which will be given during the workshop. After this welcome and introduction part, the technical part of the workshop will start. The technical part will contain the presentations. After the technical part in the last session, the presentations and also discussions will be briefly summarized. Besides a summary of presentations discussions, the last session will also include a roadmap for further work which will aim at initiating cooperation among the attendees of the workshop.

Each presentation will be 15 minutes in length with additional 5 minutes for discussions and questions so that in each session 4 papers will be presented. Taking into account the welcome/introduction in the first session and the summary/roadmap in the last session, the workshop will host 14 presentations.

Expected achievements

The organizers intend to achieve an overview of the current research in the area of engineering wireless-based systems and applications. Furthermore, a roadmap will be developed together with the attendees of the workshop with the aim to initiate cooperation among the attendees. The selected best papers will be published in Journal of Theoretical and Applied Electronic Commerce Research. In case, we received a large number of quality papers, we plan to organize a book project to publish the selected quality papers.

Submission:

Original papers not being submitted to journals or other conferences will be considered. All submitted papers will be evaluated according to its originality, significance, correctness, presentation and relevance. Papers should be submitted electronically at <http://compsac.cs.iastate.edu/EMOBS07/>. Please follow the instructions given by the web page. Manuscripts will be limited to 6 pages following IEEE conference proceedings style and guidelines. We encourage authors to present novel ideas, critique of existing work, and practical studies and experiments.

Accepted papers will be published in the workshop proceedings (EI Index) of the 31th IEEE Computer Software and Applications Conference (COMPASC2007). At least one of the authors of each accepted paper must register as a full participant of the workshop to have the paper published in the proceedings.

Workshop Organizers:**Steering Committee: (in alphabetical order)**

Jerry Gao

San Jose State University, USA

Jingsha He Beijing University of Technology, China
Axel Küpper Ludwig-Maximilians-University Munich, Germany
Claudia Linnhoff-Popien Ludwig-Maximilians-University Munich, Germany
Simon Shim SAP Labs, USA

Workshop chairs:

Jerry Gao
San Jose State University, USA
Email: jerrygao@email.sjsu.edu

Jingsha He
Beijing University of Technology, China
[Email: jhe@bjut.edu.cn](mailto:jhe@bjut.edu.cn)

Program chair:

Axel Küpper
Ludwig-Maximilians-University Munich
Email: Axel.Kuepper@ifi.lmu.de

Program committee: (in alphabetical order)

- Michael Berger, Siemens Corporate Technology, Germany (m.berger@siemens.com)
- Narciso Cerpa, University of Talca, Chile, (jtaer@utalca.cl)
- Zhangqin Huang, Beijing University of Technology, China (Email: zhuang@bjut.edu.cn)
- Mei Hsing, Fu Jen Catholic University, Republic of China (Email: mei@csie.fju.edu.tw)
- Donglin Liang, University of Minnesota, USA (Email: dowliang@gmail.com,
dliang@cs.umn.edu)
- Katina Michael, University of Wollongong, Australia (Email: katina@uow.edu.au)
- Qi Shen, Beijing University of Technology, China (shenq@bjut.edu.cn)
- George Roussos, Birkbeck College, UK (g.roussos@bbk.ac.uk)
- Junho Shim, Sookmyung Women's University, Rep. of Korea (jshim@sookmyung.ac.kr)
- Chuangbai Xiao, Beijing University of Technology, China (cbxiao@bjut.edu.cn)
- Xiao Su, San Jose State University, USA (Email: xiaosu.sjsu@gmail.com)
- Ron Vetter, UNC Wilmington, (Email: vetterr@uncw.edu)
- Michael Wallbaum, Aachen University of Technology, Germany, (Email: wallbaum@i4.informatik.rwth-aachen.de)
- Weider Yu, San Jose State University, USA (Email: Weider.Yu@sjsu.edu)
- **Soe-Tsyr Yuan**, National ChengChi University, Republic of China (Email: yuans@tpts1.seed.net.tw)