3rd Workshop on Adaptive and DependAble Mobile Ubiquitous Systems

ICPS 2009

ADAMUS'09

http://www.adamus.ua.ac.be/

Imperial College, London, UK, 13th-17th July, 2009

In conjunction with the ACM International Conference on Pervasive Services (**ICPS'09**)

CALL FOR PAPERS

Advances in mobile and wireless communication are enlarging and enhancing the services offered to and provided by mobile systems at any time and in any place. This new scenario asks for effective solutions to design, develop, and maintain novel ubiquitous services notwithstanding abrupt changes and challenging dependability requirements imposed by the highly heterogeneous and error-prone mobile provisioning environment. However, currently deployed mobile systems are often too inflexible and unable to rapidly adapt to change and this in turn leads to situations where quality-of-service and quality-of-experience are strongly and negatively affected.

To overcome the intrinsic limitations of mobile devices and environments, a variety of research studies have produced supporting methods, proof-of-concept prototypes, and disciplines. As an example, Resilience, or "the ability of the network to provide and maintain an acceptable level of service in the face of various faults and challenges to normal operation", is being recognized more and more as a fundamental attribute for truly effective mobile and ubiquitous services of today and tomorrow. However, it is still unclear whether current solutions can satisfy the challenging adaptability and dependability requirements of the emerging mobile ubiquitous services, such as mobile commerce, wireless control of robots, healthcare computing, and video-surveillance.

The ambition and mission of ADAMUS is to put on the foreground all above issues and to foster the exchange of ideas and lively discussion in order: to devise conceptual models and paradigms for change tolerance; to propose mechanisms to model, design, and develop mobile ubiquitous systems; to provide analytical and simulation tools to measure system ability to withstand faults and to optimally re-adjust to new environments; to develop scalable, maintainable, cost-effective middleware infrastructures able to support and ease the development of adaptive and dependable mobile ubiquitous services.

Building on the success of the last two editions, ADAMUS 2009 aims at serving as a meeting ground and common platform of discussion for research and industrial bodies in the field of adaptive and dependable mobile ubiquitous systems. In particular, the focus of this Workshop edition will be on service continuity defined as the ability to grant continuous distribution of mobile ubiquitous service despite the occurrence of potentially significant and sudden changes or faults in the infrastructure and the surrounding environment. Researchers and practitioners are encouraged to participate with high quality papers able to identify open issues, to discuss the limits and/or advantages of existing solutions, or to propose original and innovative techniques for adaptive and dependable applications over mobile environments. The main topics of the Workshop include, but are not limited to the following:

- Dependability and adaptation requirements and open issues for mobile ubiquitous systems;
- Resilience software engineering for mobile systems and services;
- Design principles, models, and techniques for realizing dependable and adaptive mobile ubiquitous systems;
- Context data provisioning and modelling, and context-based infrastructures;
- Human-machine interaction and usability;
- Multi-device and highly heterogeneous ubiquitous systems;
- Cross-layer adaptation techniques;
- End-to-end approaches to the quality of experience of mobile services;
- Autonomous systems for adaptation and dependability;
- Mobile-enabled middleware architectures and standards for heterogeneous wireless networks;
- Dependability and scalability of web technologies to ubiquitous systems;
- Architectures for resource and network monitoring and adaptation to networks conditions;
- Dependability measurement studies of mobile systems and services.

PAPER SUBMISSION GUIDELINES

ADAMUS 2009 invites authors to submit original and unpublished work. Papers must be written in English and should not exceed 6 pages in ACM double-column proceedings style. All submissions will be handled electronically. Authors should submit a PostScript or PDF file through the submission Web site (http://www.adamus.ua.ac.be/). Submission implies that at least one of the authors will register and present the paper. Submission implies that at least one of the authors will register and present the paper. The selection process will involve peer reviews and reviews by program committee members. All papers will be selected for the workshop based upon their originality, technical soundness, and relevance to the field of adaptive and dependable mobile ubiquitous systems. Notification of acceptance will be sent to contact authors by **March 27th, 2009**. Authors of accepted papers will be requested to provide the camera-ready version of the paper by **April 13th, 2009**.

All Accepted papers will appear in the ICPS'09 proceedings published on CD by the ACM and in the ACM Portal.

ADAMUS 2009 Best Papers will be invited to extend for possible publication in a special issue of the International Journal of Adaptive, Resilient, and Autonomic Systems(IJARAS, www.igi-global.com/IJARAS**)**

DEMO PROPOSALS

ADAMUS 2009 also encourage authors to submit demo proposals of the works presented to the workshop to the demo session organized by the main conference; for more information please refer to **ICPS'09 Call for Demonstrations** (http://acet.rdg.ac.uk/~mab/tmp/ICPS/demos.php).

Workshop Co-Chairs:

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University of Ghent, Belgium

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Important Dates:

Paper submission	**March**	**8th, 2009**
Notification of acceptance	**March**	**27th, 2009**
Final camera-ready manuscripts due	**April**	**6th, 2009**