UBICOMM 2011

Foreword

The Fifth International Conference on Mobile Ubiquitous Computing, Systems, Services and Technologies [UBICOMM 2011], held between November 20 and 25, 2011 in Lisbon, Portugal, brought together researchers from the academia and practitioners from the industry in order to address fundamentals of ubiquitous systems and the new applications related to them. The conference provided a forum where researchers were able to present recent research results and new research problems and directions related to them.

Advances in web services technologies along with their integration into mobility, online and new business models provide a technical infrastructure that enables the progress of mobile services and applications. These include dynamic and on-demand service, context-aware services, and mobile web services. While driving new business models and new online services, particular techniques must be developed for web service composition, web service-driven system design methodology, creation of web services, and on-demand web services.

As mobile and ubiquitous computing becomes a reality, more formal and informal learning will take place out of the confines of the traditional classroom. Two trends converge to make this possible; increasingly powerful cell phones and PDAs, and improved access to wireless broadband. At the same time, due to the increasing complexity, modern learners will need tools that operate in an intuitive manner and are flexibly integrated in the surrounding learning environment.

Educational services will become more customized and personalized, and more frequently subjected to changes. Learning and teaching are now becoming less tied to physical locations, co-located members of a group, and co-presence in time. Learning and teaching increasingly take place in fluid combinations of virtual and "real" contexts, and fluid combinations of presence in time, space and participation in community. To the learner full access and abundance in communicative opportunities and information retrieval represents new challenges and affordances.

Consequently, the educational challenges are numerous in the intersection of technology development, curriculum development, content development and educational infrastructure.

UBICOMM 2011 also included the workshop PECES 2011, The Third International Workshop on Pervasive Computing in Embedded Systems.

The increasing number of devices that are invisibly embedded into our surrounding environment as well as the proliferation of wireless communication and sensing technologies are the basis for visions like ambient intelligence, ubiquitous and pervasive computing. The PECES project has created a comprehensive software layer to enable the seamless cooperation of embedded devices across various smart spaces on a global scale in a context-dependent, secure and trustworthy manner.

The purpose of the workshop was to show the results of the project including short demonstrations as part of the presentations and to provide the context to discuss the problems addressed by co-operative systems and co-operative sensors in a global-scale context where different smart spaces coexist.

We take here the opportunity to warmly thank all the members of the UBICOMM 2011 and PECES 2011 Technical Program Committees, as well as the numerous reviewers. The creation of such a broad and high quality conference program would not have been possible without their involvement. We also kindly thank all the authors who dedicated much of their time and efforts to contribute to UBICOMM 2011 and PECES 2011. We truly believe that, thanks to all these efforts, the final conference program consisted of top quality contributions.

Also, this event could not have been a reality without the support of many individuals, organizations, and sponsors. We are grateful to the members of the organizing committee for their help in handling the logistics and for their work to make this professional meeting a success.

We hope that UBICOMM 2011 was a successful international forum for the exchange of ideas and results between academia and industry and for the promotion of progress in the field of P2P systems.

We are convinced that the participants found the event useful and communications very open. We also hope the attendees enjoyed the historic charm of Lisbon, Portugal.

UBICOMM 2011 Chairs:

Jaime Lloret Mauri
Sathiamoorthy Manoharan
Zary Segal
Yoshiaki Taniguchi
Ruay-Shiung Chang
Korbinian Frank
Carlo Mastroianni
Sergey Balandin
Juong-Sik Lee
Ann Gordon-Ross
Michele Ruta

PECES 2011 Chairs:

Patricia Rodrigues
Kirusnapillai Selvarajah
Neil Speirs