The IADIS International Conference Wireless Applications and Computing 2009 was held in Algarve, Portugal, 17-19 June 2009.

The IADIS Wireless Applications and Computing 2009 Conference addressed several themes related to theory and practice within wireless networks, computing and application related areas. Enormous developments in wireless technologies, which were made in recent years, enabled both researchers and industry to create new, innovative wireless and mobile application and services, protocols, middleware platforms and application frameworks. Corresponding research is related to all communication layers, but also includes application-related topics, theoretical results and non-technical issues.

The topics for this Conference included the following:

- Ad-hoc Networking
- Cellular Phone Networks and Satellite Based Systems
- Context Aware Applications
- Distributed Systems Aspects of Wireless Applications
- Integration of Wired and Wireless Networks
- Location-based Applications and Services
- Mobile Commerce
- Mobile Computing Software Architectures
- Mobile Entertainment, Gaming and Learning
- Performance and Simulation Aspects of Wireless Networks
- Pervasive Computing
- Security in Wireless Networks
- Wireless Access Networks
- Wireless Application Frameworks
- Wireless Applications Programming
- Wireless Communication Middleware
- Wireless Database Access
- Wireless End-user Devices
- Wireless Home Networks
- Wireless Multimedia
- Wireless Peer-to-Peer Networks
- Wireless Positioning Technologies
- WLANs and WPANs

The proceedings of the IADIS Wireless Applications and Computing 2009 Conference were jointly published with the IADIS Informatics 2009 and IADIS Telecommunications, Networks and Systems 2009. These events received 135 submissions from more than 26 countries. Each submission had been anonymously reviewed by an average of five independent reviewers, to ensure that accepted submissions were of a high standard. Consequently only 16 full papers were published. The overall acceptance rate corresponded to about 24 %. A few more papers were accepted as short papers, reflection papers and posters. Extended versions of the best papers were published in the IADIS International Journal on Computer Science and Information Systems (ISSN: 1646-3692) and also in other selected journals, including journals from Inderscience.
In addition to the presentation of full papers, short papers and posters, the conference also included a keynote presentation from an internationally distinguished researcher Dr. Gerd Kortuem, Computing Department, Infolab21, Lancaster University, UK.

Keynote Presentation:

**DESIGNING PHYSICAL / DIGITAL OBJECTS: FROM SENSORS TO USER INTERACTION**

by Dr. Gerd Kortuem, Computing Department, Infolab21, Lancaster University, UK.

Abstract:

A new era of embedded digital technologies is enabling a revolution in smart physical/digital objects that are location-aware, environment-aware, self-logging, and self-documenting. Their dual nature presents new and exciting challenges for product and interaction design. This talk lays out a research framework for human-centered design of physical/digital objects and presents case studies of how interactive smart objects enable novel ways of supporting human work activities.

Best Paper:

**LOCATION-AWARE ACCESS CONTROL: AN OVERVIEW** by Michael Decker, University of Karlsruhe (TH), Germany.

Abstract:

The basic notion of Location-Aware Access Control (LAAC) is to evaluate the current position of a mobile user (e.g. provided by GPS) when making the decision if the request to perform a particular operation on a particular resource under the control of an information system should be granted or denied. LAAC is a mean to forbid the access to computer resources when the mobile user stays at a place where it is not reasonable or not safe enough to access the respective resources. For example using this approach a policy could be enforced that demands that a confidential document (resource) can only be read (operation) while staying on the premises of a particular company. The aim of this paper is to give an overview on works in the field of LAAC. The special focus is on access control models which are the data models needed to formulate and maintain location-aware access policies.


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