CALL FOR PAPERS

Invited Session on User Adaptive Systems (UAS 2012)

To be held during the 4th Asian Conference on Intelligent Information and Database Systems (ACIIDS 2012), Kaohsiung, Taiwan, 19-21 March, 2012

The UAS 2012 Invited Session on ACIIDS 2012 offers an opportunity to gather research scientific works related to User Adaptive Systems in context of intelligent information consisted of user position, user behavioral, user needs, user biomedical or emotional state, as well as information technology support for such areas. Data from mentioned areas also need to be stored (after their gathering) in intelligent database systems.

Scope:

The usage of various mobile devices has been increasing dramatically every year and would be growing in the following years. This will lead to the rise of new application domains in network-connected mobile devices. This domain should be intelligent and be able to process intelligent information from all entities of the system. It could be characterize as embedded platform in intelligent environment.

The idea of User Adaptive Systems (UAS) lies in interaction between user and system through his mobile device. Such interconnection can behold in the reaction on user's non declared requests. These requests include namely user current position, user future-predicted position, his movement and tracking. Combination of these requests in conjunction with other sources of user's knowledge and behaviors are generated intelligent information which are processed by the sophisticated information system. These tasks are implemented in development of UAS. Such developed UAS can be widely implemented to Mobile Information Systems as important part for user requests processing, position tracking, user behaviors, etc. The UAS is based on intelligent database system, which covers functionalities directly related with management of intelligent information.

One of the key parameters relates to processing of intelligent information is position of a user. The UAS also may take advantages of Location Based Systems oriented to providing information support based on current user's position. The conjunction of both systems will lead to a development of smart complex systems with a higher level of interaction and intelligence addressing more complex environment especially in current cities, industrial parks and buildings.

Modern sophisticated services deliver content to the user according its actual position. Personalization of the services is very important for providing of non-redundant data. These services could be also called intelligent services. On the other hand, success of the services consists also in performance of localization. Very attractive group of localization methods applicable in various wireless network platforms is often called database correlation methods. The implementation of the appropriate database plays very important role from effective function of the UAS.

Goals:

The goal of this special session is to bring together researchers from different fields of expertise, lead to a better understanding between them, and to promote interaction in this new and interdisciplinary area. All in all, we want to create an opportunity for the participants to exchange about a wide range of topics related to pervasive adaptation and "awareness of the user", covering theoretical aspects as well as algorithms, practical methods, concrete applications, system architectures or use cases.

Topics:

- User Adaptive System as part of an intelligent environment
- Database management technologies focused on User Adaptive Systems
- User centric adaptivity in Mobile Intelligent Information Systems
- Innovative architecture and infrastructure of User Adaptive Systems for algorithms and methods implementation in Mobile Intelligent Information Systems
- Advanced Computational techniques of User Adaptive Systems
- e-health and Bio-Telemetry in User Adaptive Systems for Mobile Intelligent Information Systems
- Geographic Information Systems (GIS) for User Adaptive Systems in Mobile Information Systems
- Facility management interacting with User Adaptive Systems
- Location based services supporting User Adaptive Systems
- Database correlation positioning

Any other topics strongly related to User Adaptive Systems in Mobile Intelligent Information Systems are also welcome.

Important dates:

Paper submission deadline	*September 15, 2011*
Notification of Acceptance	*November 20, 2011*
Final paper	*December 10, 2011*

Paper submission:

The papers should be submitted electronically in PDF or MS WORD format and using the ACIIDS paper template, directly to session chair email (Ondrej.Krejcar@remoteworld.net, or peter.brida@fel.uniza.sk).

Accepted papers will be published by Springer in the ACIIDS Conference Proceedings and made available online through Springer (LNCS/LNAI).

Note: Papers submitted to invited session should be original and previously unpublished. Each paper will be peer reviewed by the program committee members and external reviewers. An accepted paper must be registered and presented at the conference venue.

Expected number of papers to be submitted and estimated attendance:

We are expected to attract about 30 submissions from which we would like to select a maximum of 10 best papers. We would like to have an acceptance rate under 30 %.

To achieve large amount of submissions we will distribute call for papers directly to selected universities in Europe, North America, Australia and Asia region.

Organizing committee:

Assoc. prof. Ondrej Krejcar Ph.D.

- chaired and organize a Special Session *on User Adaptive Systems for Mobile Wireless Systems* in 2011 at ACIIDS 2011 and *1st International Workshop on User Adaptive Systems for Mobile Wireless Systems* in 2010. He also co-organized an IFAC workshop on Programmable Devices and Embedded Systems PDeS in 2009.
- is a member of more than 15 Technical and Program Organizing Committee and several Journal Editorial Boards.
- is an author of eight journal papers on wireless localization and mobile applications development, more than 30 Lecture Notes chapters in Springer (LNCS, LNAI, LNICST, IFIP, IFMBE) and more than 60 other conference papers (Thomson ISI Proceedings) on a range of topics in mobile information technology.
- received his **Master of Science** in Control and Information Systems at Department of Measurement and Control, VSB Technical University of Ostrava, Czech Republic in 2002. He also received a **Ph.D.** in Technical Cybernetics at same department in 2008 and completed his **habilitation** in 2011 at faculty of electrical engineering and computer science on VSB Technical University of Ostrava, Czech Republic.
- is currently an Associated Professor at VSB Technical University of Ostrava, Czech Republic and a researcher at National Centre of Czech Republic - Centre for Applied Cybernetics from 2005 till now. His research and teaching interest are in wireless connected mobile devices, embedded devices, wireless networks, software framework architectures and developing, database caching and prebuffering, and localization of devices and peoples.
- spent 4 months as researcher at the Ecole Nationale Supérieure d´Informatique et de Mathématiques Appliquées de Grenoble, Institut National Polytechnique de Grenoble, France. He is an author of five Springer published articles on Localization of wireless mobile device users and crisis management.
- was a member of working group on the Fifth European Community Framework Programme, TRANSCAT - Integrated Water Management of Transboundary Catchments. Co-investigator of several national grants of Czech Republic. During the last 5 years, he supervised over the fifteen master and bachelor students.
- *serves as an external reviewer for the "Computers and Electrical Engineering Journal" and "Computer Methods and Programs in Biomedicine Journal" (ELSEVIER), "EURASIP Journal on Wireless Communications and Networking" (Hindawi) and several conferences.*
- is a member of ICST (Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering) and several international program committees and editorial boards.

Peter Brida, Ph.D.

- received his **Master of Science** in Telecommunications and the **Ph.D.** degree in Mobile radio communications from the University of Zilina, Slovakia, in 2002 and 2006, respectively. His doctoral work was in the area of the mobile positioning.
- currently works at Department of Telecommunications and Multimedia at the University of Zilina. His research interests include wireless positioning in cellular, ad hoc networks, satellite navigation systems, location based services and intelligent transport systems.
- spent 3 months as researcher at the Wireless Telecommunications Laboratory, University of Patras, Greece.
- is an author of more than 30 scientific articles and book chapter focused on positioning in wireless networks.
- *serves as an external reviewer for the Wireless Personal Communications Journal (Springer) and several conferences in area of mobile positioning.*
- is a member of several organizing committees of international conferences and workshops. He was editor of several special journal issues and conference proceedings.
- is member of ICST (The Institute for Computer Sciences, Social Informatics and Telecommunications Engineering).

Contact information:

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