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Special Issue of the Personal and Ubiquitous Computing journal on

“Mobile and Pervasive Games”

<http://www.springer.com/computer/hci/journal/779>

Guest Editors:

Damianos Gavalas
University of the Aegean, Greece
Email: dgavalas@aegean.gr

Vlasios Kasapakis
University of the Aegean, Greece
v.kasapakis@aegean.gr

Adrian David Cheok
City University London, UK
adriancheok@mixedrealitylab.org

Bin Guo
NWPU, P.R. China
Email: guob@nwpu.edu.cn

Important Dates:

Submission: Oct 15, 2014
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Submission Guidelines:

All submissions have to be prepared, according to the 'Instructions for Authors' found in <http://www.springer.com/computer/hci/journal/779>. Manuscripts must be submitted in PDF format via EasyChair (https://www.easychair.org/conferences/?conf=puc_games2014).

Only original and unpublished work will be considered. Submissions based on published conference/workshop papers have to comprise major value-added extensions (at least 30% new material). Authors are requested to attach to the submitted paper their relevant, previously published articles and a summary document explaining the enhancements made in the journal version.

Scope:

Recent developments in the areas of information technology, mobile computing and telecommunications shape a favorable landscape which generates massive opportunities for the games industry. Pervasive technologies harness the potential of the increased wireless bandwidth availability, the wide adoption of powerful mobile device platforms and the advent of networked sensor technologies.

Emerging from the fast-paced growth of pervasive computing, pervasive games represent an exciting development in gaming which leverages the use of sensor, visualization and networking technologies to provide immerse game experiences. Pervasive games extend the gaming experience out into the real world, be it on city streets or living rooms. Players equipped with mobile devices move through the game world, while sensors (either on-board or weaved into the game space) capture contextual information used to adapt game activities that vary depending on where users are, what they do or even how they feel. The inherent social and community-building aspects of networked games are widening the sector's influence on other markets, thereby boosting their worldwide potential growth.

Pervasive games appear in several genres, including mobile, location-based and augmented/mixed/trans-reality games, often utilizing novel system and network architectures (e.g., P2P, cloud gaming). Interestingly, significant efforts are put into leveraging networked games beyond entertainment, towards educational, cultural, social, environmental and training directions, thus highlighting a new potential for generating revenue. However, before such game applications can be widely deployed and used, several fundamental technical, social and business challenges need to be addressed.

The proposed SI aims at soliciting outstanding articles on all aspects of mobile and pervasive games and outlining the state of the art in this exciting area of research. Topics of interest include (but are not limited to):

- Context reasoning and modeling in mobile/pervasive games
- Novel system architectures for networked games (e.g., P2P, cloud gaming)
- Augmented, mixed and trans-reality games
- State synchronization and lag compensation techniques
- Operating system enhancements, service platforms, and middleware
- Frameworks for persistent game worlds
- Open architectures for mobile and pervasive games
- Novel edutainment applications, serious mobile/pervasive games
- Participatory sensing through games
- Social networking in multiplayer games
- Dynamic and user-generated content authoring, management and adaptation
- Authoring tools
- Computational intelligence and AI in mobile/pervasive games
- Cheat detection and prevention
- HCI issues and interaction models in mobile/pervasive games
- Networks of sensors and actuators, networked haptics
- System benchmarking and performance evaluation
- Quality of service and quality of experience
- Field trials, user acceptance, usability and user behavior studies
- Security, privacy, fault-tolerance and resiliency issues