



CALL FOR PAPERS

Pervasive and Mobile Computing

Special Issue on

“Secure ubiquitous computing“

Overview

The rapid advances in Internet technologies and new generation information systems are due to the development of the technical basis for their operation and methods of secure communication between systems, but also of the numerous technology implementations which mean that the world of modern technologies surrounding us becomes easier and friendlier in how it communicates with humans. The big progress in pervasive and mobile computing is made possible thanks to the use of the state-of-the-art achievements in computing approaches, cognitive computer systems and a great number of other algorithmic techniques (ambient and artificial intelligence, bio-inspired computation etc). Recently, such methods have had a great importance and made it possible to intelligently analyze a great amount of complex data as well as manage in secure manner the data transmissions over global communication networks, which also contributing to the development of pervasive and mobile computing.

The possibility of further development of such technology will depend on many factors such as designing new generation information systems that apply innovative security models for global communication and secure ubiquitous computing. It may also depend on proper analysis of context around the systems, and the right methods of ubiquitous communication, providing a high level of security and confidentiality of the transmitted and aggregated data.

These subjects, as well as a number of others, like the innovative and secure applications, as well as the ways of using new protocols and computational models to develop new solutions in the field of secure communication protocols, wireless transmissions or pervasive computing will form the subject of a Special Issue on “*Secure ubiquitous computing*” in the Pervasive and Mobile Computing Journal published by Elsevier. More information on this journal can be found at: <http://www.journals.elsevier.com/pervasive-and-mobile-computing/>

The list of topics includes, but is not limited to:

- Security in ubiquitous computing
- Security mechanisms in mobile computing
- Cryptography algorithms and protocols in U&MC
- Biologically inspired cryptography in U&PC
- Security of Embedded Systems and Wearable Computers
- Security aspects for Ambient Intelligence
- Security and privacy protocols
- Authentication and authorization issues
- Information leakage in secured computer systems
- Security of Internet Services
- Management of Privacy and Trust for Internet Services
- Security of Cognitive Information systems

- Secure information management
- Information hiding and splitting
- Biologically Inspired approaches for secret data management in U&MC
- Computational intelligence in security services
- New soft computing methodologies and applications for security issues
- Security and privacy for mobile data management
- Secure Data sharing and interoperability in mobile applications
- Biometrics in secure pervasive computing
- Personalized cryptography in ubiquitous computing
- Cognitive cryptography in ubiquitous computing applications

Important Dates

Manuscript submission due date: October 01, 2014

First notification (acceptance/revise/reject): December 15, 2014

Publication of the Special Issue: last quarter of 2015

Submission procedure

Papers submitted to this Special Issue for possible publication **MUST** be original and **MUST NOT** be under consideration for publication in any other journals. Submissions of both in-depth research papers and application-oriented papers are encouraged.

Best papers from the IMIS 2014 Conference (<http://voyager.ce.fit.ac.jp/conf/imis/2014/>) will be also considered for publication in this Special Issue, however, in order to be included in the Special Issue, papers must be registered and presented at the IMIS 2014 Conference.

All submissions have to be prepared according to the Guide for Authors as published in the Journal website at <http://www.elsevier.com/journals/pervasive-and-mobile-computing/1574-1192/guide-for-authors>.

Authors should select “SI: SecureComp”, from the “Choose Article Type” pull-down menu during the submission process.

A submission based on one or more papers that appeared elsewhere has to comprise major value-added extensions over what appeared previously (at least 50% new material).

Questions about the Special Issue should be directed to Special Issue Guest Editors.

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