

SPECIAL ISSUE

**Context-Awareness of Mobile Systems: Models, Algorithms
and Applications**



(SCI-E, IF=0.683)

Guest Editors:

Phan Cong-Vinh
NTT University, Vietnam

Jun Suzuki
University of Massachusetts, Boston, USA

Mohamed Bakhouya
Aalto University, Finland

Introduction:

Context awareness (CA) refers to systems can both sense and react based on their environment. The systems may have information about the circumstances under which they are able to operate and adapt their behavior accordingly based on rules or an intelligent stimulus. Such systems are a component of a mobile computing environment.

Currently context has been considered as part of a process in which users are involved, hence specifying and developing context models are needed to support context-aware applications to (a) adapt interfaces, (b) tailor the set of application-relevant data, (c) increase the precision of information retrieval, (d) discover services, (e) make the user interaction implicit, or (f) build smart environments. Context related to human factors is structured into three categories: (a) information on the user, (b) the user's social environment, and (c) the user's tasks. Likewise, context related to physical environment is structured into three categories: (a) location, (b) infrastructure, and (c) physical conditions.

Context-aware mobile systems are concerned with the acquisition of context, the abstraction and understanding of context, and application behavior based on the recognized context. In some applications, as the user's activity and location are crucial, context awareness has been concentrated more deeply on location awareness and activity recognition. Three important aspects of context are: (a) where you are; (b) who you are with; and (c) what resources are nearby.

Goals:

This special issue on *Context-Awareness of Mobile Systems: Models, Algorithms and Applications* in the ACM/Springer Mobile Networks and Applications (MONET) Journal is a place for highly original ideas about how CA is going to shape mobile networks of the future. Hence, it focuses on rigorous approaches and cutting-edge solutions which break new ground in dealing with the properties of CA. Its purpose is to make a formal basis more accessible to researchers, scientists, professionals and students as well as developers and practitioners in computer science by providing them with state-of-the-art research results and future opportunities and trends.

Scope:

Original papers are solicited for this special issue. In particular, theoretical contributions should be formally stated and justified, and practical applications should be based on their firm formal basis. Suggested topics include, but are not limited to, the following:

- Context-aware formal models and methods
- Context-aware algorithms and mechanisms
- Context-aware properties in mobile systems
- Design and performance issues of CA
- Tools, testbeds and deployment issues of CA
- Real-world applications/implementations and standardization of CA
- Socially-inspired, game theoretic and other metaphor-driven interdisciplinary approaches to CA of mobile systems

This list is not restrictive - prospective authors are encouraged to contact the editor before submitting a paper to determine whether the submission is within the scope of this special issue.

Submission Procedure:

Prospective authors may check the *Instructions for Authors* of *MONET* at the link <http://www.springer.com/engineering/signals/journal/11036>. Submitted papers must not have been previously published or be currently under consideration for publication elsewhere. Conference papers should be significantly extended and revised, thus the authors should indicate this at the time of submission. All papers will be rigorously refereed. Complete papers in LaTeX or Word format must be submitted before or on **January 31, 2012** via Online Editorial Manager System at the link <http://www.editorialmanager.com/mone/>. A copy of the paper should also be emailed to pcvinh@ntt.edu.vn where the "Subject field" of the email should contain "[MONET SI CA]". If a paper has co-authors then a correspondence contact out of co-authors must be indicated.

Important Dates:

Papers Submission Deadline: January 31, 2012

Acceptance Notification: April 1, 2012 (*)

Final Papers Due: April 15, 2012

Expected Publication: Summer 2012

(*) Authors of papers judged to be out of the scope or to fall outside the goals of this special issue may be notified earlier.

Contact Addresses of Guest Editors:**Phan Cong-Vinh**

PhD in Computing

Department of Information Technology

NTT University

298A-300A Nguyen Tat Thanh Street, Ward 13, District 4,

HCM City, Vietnam

Phone: 84 8 39408469

Fax: 84 8 39404513

Email: pcvinh@ntt.edu.vn

URL: <http://www.linkedin.com/in/phanvc>

Jun Suzuki

Associate Professor of Computer Science

University of Massachusetts, Boston

100 Morrissey Blvd.

Boston, MA 02125, USA

Email: jxs@cs.umb.edu

URL: <http://www.cs.umb.edu/~jxs>

Mohamed Bakhouya

Senior Research Scientist

Aalto University, School of Engineering

Otakaari 4, FIN-00076 Aalto, Helsinki, Finland

Email: mohamed.bakhouya@aalto or bakhouya@gmail.com

URL: <http://mbakhouya.free.fr/>