



INTRODUCTION TO THE SPECIAL ISSUE ON CONTEXT-AWARE ARCHITECTURES AND SERVICES ON EMERGING INFRASTRUCTURES

Dear SCPE readers,

Future information society is full of exciting and new applications and services, may it be a smart transportation system, an ambient living environment, or large-scale sensor networks for climate prediction. These services, among other requirements, rely on context-awareness (e.g. user behaviors, user intentions, the environmental status/ambiance, etc.). Consequent systems can adapt themselves through resource management or reconfiguration to achieve specific goals, such as functions, performance, energy budget and reliability. This area of research is challenging yet instrumental for the incoming digital era.

The unique articles submitted to the SCPE special issue on Context-aware Architectures and Services on Emerging Infrastructures” have undergone a rigorous peer-review process. The manuscripts were reviewed by at least two independent reviewers each and the guest editors finally performed meta-reviews on the papers, and according to an objective score sheet, the 2 best rated articles (out of 6 submissions; acceptance rate 33%) were finally selected for publication. In conclusion, we greatly appreciate all the authors and reviewers for their contribution to shaping this special issue.

The two papers accepted in this special issue present very interesting insights, surprisingly, both from the business and industrial perspective. The first article “Context-aware services in cooperative value chains: a key player-centered approach” attempts to promote the adoption of ubiquitous context-aware applications through exploiting the tangible benefits of key players/stakeholders. It presents a framework to identify the key players, their individual concerns and benefits, and to integrate these considerations in the deployment of a context-aware service. Wireless monitoring of valuable items in the insurance sector is demonstrated as a case study. The other article “ELL-i: An inexpensive platform for fixed things” is an invited contribution from a startup company. ELL-i is an open-source (in terms of both software and hardware) platform for Internet-of-Things applications with Power-over-Ethernet (PoE). In contrast to the mainstream wireless connection approach, ELL-i innovates on adaptive monitoring and control via wired connections. The co-operative type ownership model is intended to gather the widest possible joint efforts to develop services and products based on the open-source platform.

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