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Message from the M-MPAC 2009 Editors

In recent years, the rise of relatively powerful mobile communication devices like mobile phones, mobile Internet devices, and netbooks, as well as several types of embedded devices, like TV set-top boxes, iPods, Kidle, etc, has enabled a wide spectrum of novel pervasive applications, such as healthcare monitoring, sport tracking, context-aware collaborative computing, etc. Moreover, with the rise of cloud computing infrastructures developers have also started exploring the possibility of empowering resource-constrained mobile devices with such infrastructures offering unlimited storage and computing resources.

Developing practical applications for this kind of devices is still in most cases a complex and time-consuming process. Many of the existing applications have been built in an ad-hoc manner and without any possibility for code reuse. As the number and type of mobile and embedded devices, and pervasive applications increases, so does the need to enable interoperability among them. Identifying appropriate middleware abstractions and organizing successfully used protocols, algorithms, and software modules into generic middleware platforms can facilitate application development, foster software reuse, and enable rapid prototyping of pervasive applications.

Building on the success of the previous editions of MPAC and MobMid, this year's M-MPAC workshop combines the thematic areas of the two workshops and aims to develop a research roadmap on essential middleware abstractions and platforms for pervasive mobile and embedded systems. The M-MPAC 2009 technical program addresses various relevant subjects in the field. These include Pervasive Computing (context-awareness, interoperability, social networking, smart-spaces) Ad-hoc Networking (models, frameworks, broadcast and epidemic protocols), Body-Sensor Networks (resource abstraction, middleware architecture) and Tangible Devices (tangible user interfaces).

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M-MPAC 2009

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