



From the Editor in Chief

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Looking Ahead

Nigel Davies

Welcome to the latest issue of *IEEE Pervasive Computing*. This quarter, we held our annual editorial board meeting. Traditionally, this meeting takes place in Santa Clara, but this year, Google hosted the event at its Mountain View campus. We gathered to reflect on the state of the magazine and upcoming challenges and opportunities. We also planned the issues for the coming year and discussed ways to continually improve the magazine. One of the key challenges we discussed was how to ensure the maximum impact for authors and their work.

EXPANDING OUR REACH

Traditionally, our strategy of presenting themed issues has worked well—the issues become a “must-read” for researchers working in the featured area. However, the multidisciplinary aspects of the work we cover means that these themed issues are often of immense value beyond the pervasive computing community, so it’s critical to ensure a heightened awareness of the magazine within these communities.

One of our key objectives for the next 24 months is to increase the impact of the magazine’s material, and I’m delighted to announce that Marc Langheinrich will lead this effort as *IEEE Pervasive Computing*’s new publicity officer. Increasing our impact delivers real value not only to our authors but

also to our subscribers, through ever higher-quality submissions. If you have suggestions regarding how we might reach out to other communities, please let us know.

DEPARTMENTAL DEVELOPMENTS

We’re also continuing our approach of regularly refreshing *Pervasive*’s departments, which are one of the most popular parts of the magazine. Starting with the January–March 2013 issue, Elizabeth Belding will be taking over the Conferences department. We aim

Health is one of the key areas where pervasive computing could have a significant influence on people’s lives.

to provide reports on all of the major conferences in the field, so if you know of a venue we’re not covering, please let us know.

Also, we’re phasing out the Works-in-Progress department, which Anthony Joseph has successfully edited for many years. In its place, we’ll be introducing a new department, Notes from the Community, edited by Jason Hong and Mary Baker (see the related sidebar).

We also plan to change the Health department, with Stephen Intille,

Anind Dey, and Jesus Favela as the editors. Indeed, health is one of the key areas where pervasive computing could have a significant influence on peoples’ lives.

IN THIS ISSUE

Speaking of healthcare, the issue in your hands (or on your screen) is dedicated to this important topic, and I thank Mary Baker and Joseph Kanny for putting the issue together. Continuing the health theme, the Spotlight department reports on a recent keynote by Paul Jones, CTO of the UK’s National Health Service. The NHS represents a phenomenal achievement and an institution in which many people take immense pride. During his keynote at MobiSys 2012, Jones discussed the challenges of using mobile technology in one of the world’s largest organizations.

This issue also presents two feature articles on the evaluation of mobile and pervasive systems. In “Rethinking Experimental Designs for Field Trials,” Antti Oulasvirta describes his 10-plus years of experience in conducting field trials of pervasive systems. He argues that field studies challenge us to design evaluations as quasi-experiments—that is, studies that don’t assume perfect control and randomization. The issue of field trials and work outside the laboratory is of course central to our research field, and *Pervasive* has a long

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NOTES FROM THE COMMUNITY

This new department is designed to promote and highlight content submitted by members of the pervasive computing community. Such content might include works in progress, a new smartphone app, relevant news items, cool videos, critiques, content contributed from courses, and calls for papers. We've created a pervasive computing subreddit so that anyone in the world can post links and comments and vote on these contributions. We'll also be incorporating content from this site into a quarterly column for *IEEE Pervasive Computing*. Please join us at www.reddit.com/r/pervasivecomputing.
— Jason Hong and Mary Baker

history of articles describing such trials and the issues they raise.^{1,2}

Although field trials offer insights that are hard to obtain in any other way, they're also difficult to conduct and time-consuming. This is particularly true in the case of systems designed to support emergency workers. In "Experience Prototyping: A New Approach to Designing Fire-fighter Navigation Support," Markus Klann and Mirko Geissler explore the idea of mixed-reality prototyping. User trials are combined with simulations in an effort to reduce the cost and improve the accuracy of testing new technology.

Finally, I'd like to thank Paul Lukowicz, who is stepping down from the role of Associate Editor in Chief. We're currently in the process of selecting a replacement, and I hope to announce a new AEIC in the next issue.

The breadth of topics covered in this issue, the quality of the material, and the exciting new developments taking place with our departments provide compelling evidence that *Pervasive* is continuing in its mission to serve as a catalyst toward Mark Weiser's vision. Much exciting work remains to be done. ■

REFERENCES

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2. O. Storz et al., "Public Ubiquitous Computing Systems: Lessons from the e-Campus Display Deployments," *IEEE Pervasive Computing*, vol. 5, no. 3, 2006, pp. 40–47.

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