

GetMobile



NEW DIRECTIONS IN MOBILE INTERACTION:

GetMobile's "Highlights" section explores recent leaps and bounds made in the area of gestural interfaces. **Page 7**



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MOBILE COMPUTING & COMMUNICATIONS REVIEW

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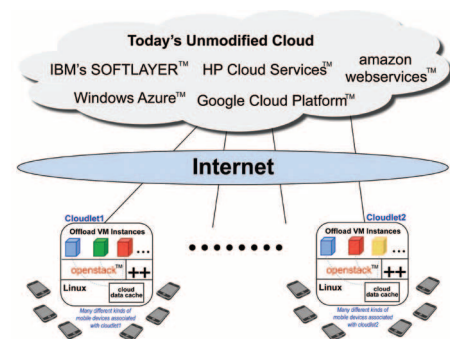
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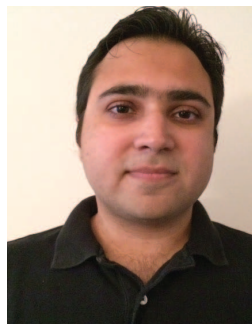
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management, connectivity management, data transport, congestion management, location management, routing and security. Her recent research on mobile computing and wireless networking has been funded by the National Science Foundation (NSF), the Office of Naval Research (ONR), Google, HP Labs and Microsoft. She was recently the Technical Program Chair for MOBICOM 2013 and has served on numerous program and organizing committees in the area of mobile computing and communications. More information can be found at <http://mobiuss.cs.illinois.edu>.



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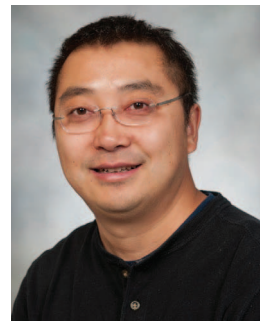
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MESSAGE FROM THE EDITOR-IN-CHIEF

MC²R takes a fresh direction with a new, exciting look.

Eyal de Lara



MC²R has come a long way since its inaugural issue was published in April of 1997. In its first issue, Dr. Victor Bahl, as Editor-in-Chief, elegantly articulated the mission of the new publication:

“At MC²R, our job is to help create a forum for the distribution of ideas and information that will provide you with material to continue new research and development. We will endeavor to provide you with up to date information on relevant conferences, seminars, workshops, and meetings. We will provide you with reports written by leading experts in the field and overviews of relevant pieces of works that may have been published elsewhere. We will provide you with book reviews and high-quality ground-breaking papers. In short, we will work hard to provide you with both a global view of the technology and specific research areas with the objective of fostering interest and discussion in this area.”

Dr. Bahl’s vision for the new publication was bold and ambitious. In essence, MC²R

set itself to provide a venue for archival publication of mobile research, as well as to foster the development of the nascent SIGMOBILE research community. By all measures, the mobile research community has enjoyed tremendous growth over the past two decades, and this success can be attributed in part to MC²R. As a result of this massive growth, however, the time has come to re-evaluate the role that MC²R plays in the community. The mobile research community is increasingly expanding into diverse new areas, such as mobile social networks, activity recognition, vehicle telematics, wearables, and ubiquitous computing, just to name a few. This growth has fostered the creation of new ACM and IEEE transactions (e.g., TMC, TOSN), as well as offerings by Elsevier and others, that have become the preferred venue for archival journal paper publication. To better serve the needs of the mobile research community in this new landscape, MC²R is evolving in a

new, exciting direction.

You are holding in your hands the first issue of *GetMobile*, a complete redesign of the Mobile Computing and Communication Review. Instead of publishing papers drawn from a traditional open call for paper, each issue of *GetMobile* will consist of a set of regular sections curated by a committed group of editors. Section articles address topics of broad interest and are meant to be accessible to the wider mobile research community. This format will provide an attractive vehicle for mobile researchers to keep abreast of developments of interest to the broad community, and serve as an outlet for the publication of impactful contributions that may not be appropriate for conferences or archival journals. *GetMobile* brings the SIGMOBILE flagship’s publication back to its original goal, as a community building tool that fosters the continued development and growth of the mobile research community.

GetMobile issues will include the following regular sections:

- Article Highlights, edited by Shyamnath Gollakota (University of Washington) and Robin Kravets (UIUC). This section presents condensed versions of noteworthy papers recently published at mobility-related conferences. This issue's article highlights papers on three systems that explore the frontiers of human computer interaction, offering inspiring new directions in the field.
- Retrospectives, edited by Carla Ellis (Duke University). This section looks back at seminal contributions in the field and explores how they have withstood the test of time, as well as their effect on research and practice over the years. In our inaugural issue, this column presents an article by Mahadev Satyanarayanan, who reflects on the evolution of computation offloading over the last twenty years.
- (Almost) Unpublishable Results, edited by Jacob Sorber (Clemson University) and Lin Zhong (Rice University). This section provides a venue for the dissemination of work whose value is broadly acknowledged by the mobile research community, but which nevertheless has traditionally been hard to publish in venues, such as conferences and journals. In our inaugural issue, this column reports on the Microsoft Indoor Localization Competition, an effort to stimulate the development of indoor location solutions by providing academic and industry groups from around the globe the opportunity to test their indoor location technologies in a realistic, unfamiliar environment.
- Experimental Methods, edited by Khai N. Truong (UNC Charlotte). This section addresses the growing importance that user-centered evaluation techniques have in mobile research by reviewing topics that every mobile researcher should know about before conducting user-centered experiments. This issue addresses the important question of how to properly size a user study.
- Arm's Length, edited by Matthai Philipose (Microsoft Research). This section discusses developments in fields that fall outside of the traditional SIGMOBILE core, but which have applications in mobile systems and networks. This issue showcases the Lab of Things, a community-based

research platform designed to reduce the effort required to deploy sensors and devices to collect data in homes and other environments.

- Makers, edited by Prabal Dutta (University of Michigan) and Iqbal Mohomed (IBM Research). This section focuses on developments in the growing maker community. In this issue, the editors provide an introduction into the maker and DIY (do-it-yourself) culture and discuss some of the broad trends that have made it possible.
- Mobile Platforms, edited by Sharad Agarwal (Microsoft Research) and Marco Gruteser (Rutgers University). This section discusses developments in mobile platforms and their use in research. Our article in this issue reports on early experiences with Google Glass as an enabler of mobile research.
- Standards, edited by Michelle X. Gong (Google). This section provides an update on developments at standards bodies, such as the IETF and W3C. This issue reports on efforts to improve wireless LAN throughput and efficiency in 802.11ac and 802.11ax.
- Education, edited by Nilanjan Banerjee (UMBC) and Sami Rollins (University of San Francisco). This section reports on developments in mobile and wireless education, and our article this issue showcases MIT App Inventor, a visual blocks programming language for developing applications for phones and tablets, and its use by beginners and non-programmers in colleges and universities, as well as K-12 and afterschool programs.

GetMobile is the result of a concerted effort by a large group of talented and motivated individuals. I want to thank the editorial board and SIGMOBILE for believing in this new vision, and for providing the resources to make it happen. I also want to thank all the contributing authors for trusting us with their content.

As a community building tool, *GetMobile* can only succeed if you, the community, take an active part on it. I want to encourage you to read the Call for Contributions on the last page to learn about how you can contribute to future issues.

I hope you enjoy this issue, and welcome your thoughts about *GetMobile* in general, and this issue in particular. ■

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