FOREWORD

Special Section on Trust, Security and Privacy for Pervasive Applications

Pervasive Computing (or ubiquitous computing) is a rapidly developing research area cross various disciplines including computer science, electronic engineering, mobile and wireless communications, etc. The growing availability of microprocessors with built-in communications facilities makes it possible for people to obtain information and services anytime and anywhere. Pervasive computing could have a wide range of applications such as healthcare, homecare, intelligent transportation, and environmental monitoring. However, it is quite difficult for pervasive applications to satisfy trust, security and privacy requirements, as a result of their ability to gather sensitive data and change the environment via actuating devices autonomously.

This special section on Trust, Security and Privacy for Pervasive Applications aims at bringing together researchers and practitioners in the world working on trust, security, privacy, and related issues such as technical, social, and cultural implications for all emerging devices, services, applications, networks, and systems, and providing a forum for them to present and discuss emerging ideas and trends in this highly challenging research area. In order to achieve these goals, an editorial committee for this special section was organized to publish new research results on this area. For the call for papers, 40 papers were submitted to this special section, and 15 of them (including 2 invited papers and 2 letters) are accepted for publication through a review process. The accepted papers cover a wide variety of topics in this hot research area. We believe that all these papers provide a lot of useful information for readers studying and/or working in this area. We also believe that this special section will definitely intrigue more research on this promising area in the near future.

The editorial committee would like to thank all the authors who submitted their papers to this special section, which made this special section come true. We would also like to thank all the reviewers who spent a lot of time on reviewing these papers with a lot of valuable comments and suggestions, which made it easy to select high-quality papers.

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Guojun Wang, Laurence T. Yang, and Kouichi Sakurai, Guest Editors-in-Chief
Guojun Wang (Nonmember) received B.Sc. in Geophysics, M.Sc. in Computer Science, and Ph.D. in Computer Science, from the Central South University, P.R. China. He is currently a Professor at Central South University. He is the Director of the Trusted Computing Institute in the University. He is also a Vice Head of the Department of Computer Science and Technology in the University. He has been an Adjunct Professor at Temple University (USA), a Visiting Scholar at Florida Atlantic University (USA), a Visiting Researcher at the University of Aizu (Japan), and a Research Fellow at the Hong Kong Polytechnic University (Hong Kong). His research interests include trusted computing, pervasive computing, mobile computing, and software engineering. He is a senior member of the China Computer Federation, and the Academic Committee (AC) member of the YOCSEF of the China Computer Federation.

Laurence T. Yang (Nonmember) is a professor at St Francis Xavier University, Canada. His research includes high performance computing, embedded systems, ubiquitous/pervasive computing and intelligence. He has published around 300 papers (including around 100 international journal papers such as IEEE and ACM Transactions) in refereed journals, conference proceedings and book chapters in these areas. He has been involved in more than 100 conferences and workshops as a program/general/steering conference chair and more than 300 conference and workshops as a program committee member. He served as the vice-chair of IEEE Technical Committee of Supercomputing Applications (TCSA) until 2004, currently is the chair of IEEE Technical Committee of Scalable Computing (TCSC), the chair of IEEE Task force on Ubiquitous Computing and Intelligence. Currently he is also in the steering committee of IEEE/ACM Supercomputing conference (SCxx) series. In addition, he is the editors-in-chief of several international journals and few book series. He is serving as an editor for around 20 international journals. He has been acting as an author/co-author or an editor/co-editor of 30 books from Kluwer, Springer, Nova Science, American Scientific Publishers and John Wiley & Sons. He has won 5 Best Paper Awards (including the IEEE 20th International Conference on Advanced Information Networking and Applications (AINA-06)); 4 IEEE Best Paper Awards; 2 IEEE Outstanding Paper Awards; one Best Paper Nomination; Distinguished Achievement Award (2005); IEEE Distinguished Achievement Award (2009); Canada Foundation for Innovation Award (2003); He has been invited to give around 20 keynote talks at various international conferences and symposia.

Kouichi Sakurai (Member) received the B.S. degree in mathematics from Faculty of Science, Kyushu Univ. and the M.S. degree in applied science from the Faculty of Engineering, Kyushu Univ. in 1986 and 1988, respectively. He was engaged in research and development on cryptography and information security at the Computer and Information Systems Lab. at Mitsubishi Electric Corporation from 1988 to 1994. He received his Doctorate in engineering from the Faculty of Engineering, Kyushu Univ. in 1993. From 1994, he worked for the Dept. of Computer Science of Kyushu Univ. in the capacity of associate professor, and became a full professor in 2002. He is concurrently working also with Institute of Systems & Information Technologies and Nanotechnologies, as the chief of Information Security laboratory, for promoting research corporations among the industry-university-government under the theme “Enhancing IT-security in social systems”.
