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# Networking and Mobile Computing

Third International Conference, ICCNMC 2005  
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# Preface

Welcome to Zhangjiajie for the 3rd International Conference on Computer Network and Mobile Computing (ICCNMC 2005).

We are currently witnessing a proliferation in mobile/wireless technologies and applications. However, these new technologies have ushered in unprecedented challenges for the research community across the range of networking, mobile computing, network security and wireless web applications, and optical network topics.

ICCNMC 2005 was sponsored by the China Computer Federation, in cooperation with the Institute for Electrical and Electronics Engineers (IEEE) Computer Society. The objective of this conference was to address and capture highly innovative and state-of-the-art research and work in the networks and mobile computing industries. ICCNMC 2005 allowed sharing of the underlying theories and applications, and the establishment of new and long-term collaborative channels aimed at developing innovative concepts and solutions geared to future markets.

The highly positive response to ICCNMC 2001 and ICCNMC 2003, held in Beijing and Shanghai, respectively, encouraged us to continue this international event. In its third year, ICCNMC 2005 continued to provide a forum for researchers, professionals, and industrial practitioners from around the world to report on new advances in computer network and mobile computing, as well as to identify issues and directions for research and development in the new era of evolving technologies.

ICCNMC 2005 was the result of the hard work and planning of a large group of renowned researchers from around the world, who served on the technical Program Committee and the Organizing Committee. Their invaluable efforts in developing this technical program are most gratefully acknowledged. We also would like to take this opportunity to thank our keynote speakers and panelists.

We would like to thank the Program Co-chairs, Prof. Xicheng Lu and Prof. Wei Zhao, for their devotion to ICCNMC 2005. We strongly feel that the interaction between the two working groups in the USA and China was especially important to the success of the conference. To help lay a foundation for a continuing dialogue, three keynote speakers were invited to provide perspectives on different aspects of the challenges we all face.

We would like to express our special gratitude to the National Natural Science Foundation of China. Last but not least, we would also like to take this opportunity to thank our industrial sponsors. Without their extensive and generous supports for both the technical program and the local arrangements, we would not have been able to hold a successful conference at all.

We hope that all of our participants found the conference both stimulating and enjoyable.

July 2005

Chita Das and Hequan Wu

## **Message from the Program Co-chairs**

Welcome to the proceedings of the 2005 International Conference on Computer Networks and Mobile Computing (ICCNMC 2005). This year's conference was the third conference in its series aimed at stimulating technical exchange in the emerging and important fields of mobile, wireless, optical communications networks, and mobile computing.

ICCNMC 2005 followed in the footsteps of its previous conferences in that it addressed in-depth, highly innovative and state-of-the-art research and work in the networks and mobile computing industries. This year's technical program was extremely strong and diverse, with contributions in both established and evolving areas of research. The conference featured three keynote lectures by distinguished academic and industrial leaders and a panel discussion organized by outstanding computer scientists. Furthermore, a total of 662 papers came from over 28 different countries, representing a truly "wide area network" of research activity. The Program Committee engaged in a thorough and careful selection process. Due to the space constraints, only 133 papers were selected as normal papers, and 13 were selected as short presentations. Thus, we produced an excellent conference program that included a wide range of technical challenges in view of the growing interest in network architectures, protocol design and analysis, mobile computing, routing and scheduling, congestion management, quality of service, admission control, Internet and Web applications, multimedia systems, network security, and optical communication technologies.

We would like to express our sincere gratitude to all those individuals whose contributions helped to make ICCNMC 2005 a successful and valuable conference. We were delighted to present Outstanding Service awards to Jiannong Cao, Xiuzhen Cheng, Jinshu Su, Jie Wu, and Ming Xu for their tireless efforts and significant contributions towards organizing the conference. Special thanks are due to Ming T. Liu, our Honorary Chair, whose guidance was always extremely valuable. We also wish to thank the General Co-chairs, Chita Das and Hequan Wu, for their support and contributions. We would like to express our appreciation to all authors for their contributions, to the Program Committee members, and to the external reviewers for their hard work in evaluating submitted papers. Finally, several prestigious organizations, including the China Computer Federation, IEEE Computer Society Beijing Center, IEEE Technical Committee of Distributed Processing, and the Hunan Computer Society, provided valuable endorsement and sponsorship of ICCNMC 2005. We are truly grateful for their contributions.

July 2005

Xicheng Lu and Wei Zhao

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