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# Information Networking

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for Enhanced Internet Services

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# Preface

The papers in this book were prepared for and presented at the International Conference on Information Networking 2003 (ICOIN 2003), which was held from February 12 to 14, 2003 at Jeju Island, Korea. It was organized by the KISS (Korean Information Science Society) SIG-IN in Korea, in cooperation with IPSJ (Information Processing Society of Japan) SIG-IN and IEEE Region 10. The papers were selected through two steps: (1) refereeing by TPC members and reviewers; and (2) on-site presentation review by session chairs.

Although we believe that the world is becoming ever smaller through the information networking, the conventional IT and Internet technologies seem to be in their mature stage while the advent of the new technologies required seems to be delayed. To find a new path, ICOIN 2003 posted a call for papers on the technologies needed for end-to-end and networked QOS in wired and wireless Internet, focusing on the enhanced TCP/IP Internet protocol mechanism, its implementation, and the technology required to support wired and wireless Internet. The papers of this book concentrated on IP technologies, which will be the basis of ubiquitous networking.

This book includes the following subjects related to information networking, from the low-layer transmission technologies to higher-layer protocols and services:

- High-Speed Network Technologies: Concerned with switching, routing and integration. Especially optical network technologies are covered.
- QOS on the Internet: Concentrated on the enhancement of the Internet QOS. RSVP/DiffServ-related algorithms and protocols are presented.
- Enhanced Protocols on the Internet: Examines the enhancement or improvement of the conventional Internet protocols/services and network architectures: wireless LAN and PAN; multicast; next-generation architecture; and contents distributions.
- Mobile Internet: Concerned with mobile Internet and ad hoc networks: wireless access technologies, mobile IP, TCP over mobile IP.
- Network Security: Examines the network-related security matters from algorithms to IP security-related network architectures.
- Network Management: Examines the management technologies for networks and services.
- Network Performance: Concerned with performance issues on the Internet. Especially a paper dealing with problems of simulation for performance studies is presented.

The papers are complemented by invited presentations by Krzysztof Pawlikowski (University of Canterbury, New Zealand) and Roy Sumit (University of Washington, USA). And all papers in this book, we believe, will prove rewarding for all computer scientists working in the area of information networking.

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