Hyun-Kook Kahng
Shigeki Goto (Eds.)

Information Networking

Networking Technologies for Broadband and Mobile Networks

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Busan, Korea, February 2004
Revised Selected Papers

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Preface

The papers in this book were prepared for and presented at the International Conference on Information Networking 2004 (ICOIN 2004), which was held from February 18 to 20, 2004 at Busan, Korea. It was organized by the KISS (Korean Information Science Society) SIG-IN in Korea and the IPSJ (Information Processing Society of Japan) SIG-IN. The papers were selected through two steps: (1) referral by TPC members and reviewers; and (2) on-site presentation reviews by session chairs and conference participants.

The theme of ICOIN 2004 was "Convergence in Broadband and Mobile Networking", considering high-speed mobile networks. Even though it seems that a kind of "slow-speed" mobile Internet service is to be provided in the market sooner or later, it would not be an ultimate solution for the users, who require more "QoS-rich" services. In the near future, mobile services will adopt high-speed networking technology. At the same time, mobile service users will anticipate that a reasonable level of quality of service and security is provided. Based on this, ICOIN 2004 requested papers on technologies for mobility, quality of service, security, broadband access, and applications, focusing on enhanced Internet protocols and algorithms, their implementation, and the convergence technology required to support wired and wireless Internet.

This book contains articles on the following subjects related to information networking from the low-layer transmission technologies to the higher-layer protocols and services.

- Mobility Internet and Ubiquitous Computing: Concerned with mobile ad hoc networking, mechanisms for ubiquitous environments, routing in mobile networks, and mobile IP protocols.
- QoS, Measurement and Performance Analysis: Concerned with QoS-related routing algorithms and protocols, QoS provisioning Internet protocols, modelling and analysis, and performance measurement.
- High-Speed Network Technologies: Concerned with multicast in high-speed networks, advanced algorithms and protocols, and switching and routing.
- Next-Generation Internet Architecture: Concerned with new Internet protocols such as IPv6, active networks, and optical networks.
- Security: Concerned with security in mobile networks and active networks, security infrastructures, authentication mechanisms, and detection mechanisms.
- Internet Applications: Concerned with services using Internet protocols, and application-level protocols for VoIP, multicast, and reliability.

All papers in this book, we believe, will prove rewarding for all computer scientists working in the area of information networking.

May 2004

Shigeki Goto
Hyun-Kook Kahng

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