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Preface

With the rapid development in wireless-network and portable computing and communication devices, mobile users are expected to have access to information from anywhere at anytime in the near future, in the form of ubiquitous computing, a term coined by the late Mark Weiser of Xerox, PARC. Indeed, the emerging mobile technology will probably bring us the next wave of information revolution and change our society as we move into the next millennium. Before this vision can be realized, a number of challenges have to be overcome. Traditionally, network-based information systems have been developed under wired assumptions about the connectivity and topology of the underlying networks. To eliminate these limitations from wireless and mobile environments, research efforts are needed in networks, architecture, software infrastructure, and application levels, in order to provide mobile data access over hybrid wireless and wired networks, which is the central theme of this conference.

These proceedings collect the technical papers selected for presentation at the First International Conference on Mobile Data Access (MDA'99), held in Hong Kong, following its return to China, on December 16–17, 1999. The conference is held in conjunction with the International Computer Science Conference, the International Conference on Real-time Computing Systems and Applications, and the Pacific Rim International Symposium on Dependable Computing, forming part of the International Computer Congress.

In response to the call for papers, the program committee received 39 submissions from North America, Europe, Asia, and Oceania. Each submitted paper underwent a rigorous review by three to four referees, with detailed referee reports. Finally, these proceedings represent a collection of 20 research papers, with contributions from ten different countries from four continents. The contributed papers address a broad spectrum on mobile data access issues, ranging from the lower level core research efforts on communication on wireless networks and location management, to the intermediate level research topics on data replication and transaction processing, and finally to the higher user level research applications on ubiquitous information services.

We are extremely excited to align a very strong program committee, with outstanding researchers in the areas of mobile computing and databases. We would like to extend our sincere gratitude to the program committee members, who performed a superb job in reviewing the submitted papers for contributions and technical merits towards mobile data access.

Last but not least, we would like to thank the sponsors, for their support of this conference, making it a success. Thanks go to the IEEE Hong Kong Computer Section, ACM Hong Kong Chapter, Sino Software Research Institute at Hong Kong University of Science and Technology, the IEEE Technical Committee on Personal Communications, and ACM SIGMOBILE.

December 1999 *Hong Va Leong, Wang-Chien Lee, Bo Li and Li Yin*

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Table of Contents

Session I: Wireless Networks and Communications

Wireless VoIP: Opportunities and Challenges 3
Jin Yang, Ioannis Kriaras

GSM Mobile Phone Based Communication of Multimedia Information: A Case Study 14
Y.S. Moon, H.C. Ho, Kenneth Wong

A Witness-Aided Routing Protocol for Mobile Ad-Hoc Networks with Unidirectional Links 24
Ionuţ D. Aron, Sandeep K. S. Gupta

Accessing Opportunities for Broadband Optical Wireless Local Loops in an Unbundled Access Network 34
Edward Mutafungwa, Kamugisha Kazaura

On Simulation Modeling of Information Dissemination Systems in Mobile Environments 45
Wang-Chien Lee, Johnson Lee, Karen Huff

Session II: Transaction Processing in Mobile Environments

On the Performance of Transaction Processing in Broadcast Environments 61
Victor C. S. Lee, Sang H. Son, Kwok-Wa Lam

Transaction Processing in an Asymmetric Mobile Environment 71
Eppie Mok, Hong Va Leong, Antonio Si

Speculative Lock Management to Increase Concurrency in Mobile Environments 82
P. Krishna Reddy, Masaru Kitsuregawa

Optimistic Concurrency Control in Broadcast Environments: Looking Forward at the Server and Backward at the Clients 97
Victor C. S. Lee, Kwok-wa Lam

Session III: Ubiquitous Information Services

Modelling the WAP Transaction Service Using Coloured Petri Nets 109
Steven Gordon, Jonathan Billington

Enabling Ubiquitous Database Access with XML 119
Hui Lei, Kang-Woo Lee, Marion Blount, and Carl Tait

Design and Evaluation of an Information Announcement Mechanism for Mobile Computers 135
Shigeaki Tagashira, Fumitake Inada, Keizo Saisho, Akira Fukuda

Active Rule System for Adaptive Mobile Data Access 146
Shiow-yang Wu, Shih-Hsun Ho

Preserving Smooth Traffic and High Presentation QoS for VBR-Encoded Video 156
Se-Jin Hwang, Myong-Soon Park

Session IV: Mobile Data Replication and Caching

Peer Replication with Selective Control 169
David H. Ratner, Peter L. Reiher, Gerald J. Popek, Richard G. Guy

Cache Coherency in Location-Dependent Information Services for Mobile Environment 182
Jianliang Xu, Xueyan Tang, Dik Lun Lee, Qinglong Hu

An Autonomous Data Coherency Protocol for Mobile Devices 194
Masahiro Kuroda, Takashi Sakakura, Takashi Watanabe, Tadanori Mizuno

Session V: Mobility and Location Management

Location Management Strategies for Reducing Both Movement Cost and Locating Cost Simultaneously 209
Chao-Chun Chen, Chiang Lee

Internet Mobility Support Optimized for Client Access and Its Scalable Authentication Framework 220
Sufatrio, Kwok-Yan Lam

Proxy Agent Consistency Service Based on CORBA 230
Kyung-Ah Chang, Byung-Rae Lee, Tai-Yun Kim

Keynote Speeches

Integrating Mobile Objects into the Wirelessly Wired World: The Need for Energy Efficient Algorithms 243
Prof. Imrich Chlamtac

Databases Unplugged: Challenges in Ubiquitous Data Management 244
Prof. Michael Franklin

Author Index 245