

Message from the Conference Chair

The Second International Conference on Mobile Data Management (MDM 2001) is the continuation of the First International Conference on Mobile Data Access (MDA'99), which was also held in Hong Kong. Organizing MDM 2001 was a very rewarding experience for me. It gave me an excellent chance to work with many fine colleagues both inside and outside Hong Kong, and the opportunity to interact with leading companies in the mobile industry.

I am thankful to Mike Franklin of UC Berkeley and John Lui of the Chinese University of Hong Kong for putting together a world-class Program Committee, which worked very hard to bring an excellent technical program to the conference.

MDM 2001 includes an industrial track consisting of both invited and submitted papers. I would like to thank David Cheung of the University of Hong Kong and Wang-Chien Lee of Verizon, USA, for setting the program for the industrial track. Wang-Chien, in particular, is responsible for inviting speakers from the USA. I strongly feel that the interaction between academia and industry is of particular importance in the mobile area since ideas and applications cannot be realized if they do not fit into the mobile infrastructure built by the industry.

I appreciate very much the support of the Hong Kong Polytechnic University for hosting the conference, colleagues in the Department of Computing, namely, Alvin Chan, Hong Va Leong, and Allan Wong, for taking care of every fine detail in the operation of the conference, Kian-Lee Tan of the National University of Singapore for his relentless effort in collecting the manuscripts and meeting the publication deadline, Victor Lee of the City University of Hong Kong and Jeffrey Yu of the Chinese University of Hong Kong for handling the publicity of the conference, and Joseph Fong of the City University of Hong Kong for raising funds for the conference.

Last but not least, the conference would not have been possible without the generous support of our industrial sponsors, which include Hutchison Telecom, Nokia (HK) Ltd., and Oracle (HK) Ltd. At the time of writing, I am still expecting a few more industrial sponsors and invited presentations in the industrial track. Those whom I cannot acknowledge here by name, I would like to thank in advance in anticipation of their support!

November 2000

Dik Lun Lee

Preface

Welcome to the Second International Conference on Mobile Data Management (MDM2001). The conference serves as a forum for the exchange of technical ideas and research results in the areas of mobility and database management.

This year, we have a very exciting program for MDM2001. Many quality papers were submitted to the conference. All of the submitted papers were reviewed by at least three PC members. Due to the limitations of the program schedule as well as the desire to organize the conference using a single track format, we selected only 18 papers for full presentation at the conference. As a result many excellent papers could not be accepted.

The papers chosen for presentation span a large range of topics, from network protocol issues up to the semantics of mobile applications. The common theme of all these papers is their recognition of the central role played by data management techniques in the development of the emerging world of mobile and wireless applications.

We have loosely organized these papers into six areas:

1. DATA MANAGEMENT ARCHITECTURES,
2. CONTENT DELIVERY,
3. DATA BROADCASTING,
4. CACHING AND HOARDING,
5. COPING WITH MOVEMENT,
6. NETWORKS AND SYSTEMS ISSUES

In addition to the research track, we have sought to broaden the scope of the conference with an industrial session as well as poster presentations. Overall, the program strikes a comfortable balance between applied and theoretically oriented papers.

We were fortunate to have the help of a large group of renowned and hard-working researchers from around the world, who served on the technical program committee and the organizing committee. Their invaluable efforts in helping put together this technical program are most gratefully acknowledged. We would also like to take this opportunity to thank our keynote speakers.

We are only at the very beginning of what will be an explosion in mobile and wireless applications. These applications present new problems across the range of computer systems, networking, and data management topics. Through this forum, we hope to facilitate the dialog among leading researchers and practitioners in all of these areas, and we look forward to a productive and lively conference.

November 2000

Mike Franklin
John C.S. Lui

The Second International Conference on Mobile Data Management (MDM 2001)

Executive Committee

Honorary Chair:	Tharam Singh Dillon (Hong Kong Polytechnic University)
Conference Chair:	Dik Lun Lee (Hong Kong University of Science and Technology)
Technical Program:	Michael Franklin (University of California, Berkeley) John Chi-Shing Lui (Chinese University of Hong Kong)
Publicity:	Victor Lee (City University of Hong Kong) Jeffrey Yu (Chinese University of Hong Kong)
Local Arrangement:	Alvin Chan (Hong Kong Polytechnic University) Hong Va Leong (Hong Kong Polytechnic University)
Finance:	Allan Wong (Hong Kong Polytechnic University)
Industrial Track:	David Cheung (Hong Kong University) Wang-Chien Lee (GTE Labs, USA)
Publication:	Kian-Lee Tan (National University of Singapore)
Fund Raising:	Joseph Fong (City University of Hong Kong)

Program Committee

Swarup Acharya	Lucent Bell Labs (USA)
Divyakant Agrawal	UC Santa Barbara (USA)
B.R. Badrinath	Rutgers University (USA)
Daniel Barbara	George Mason University (USA)
Philippe Bonnet	Cornell University (USA)
H.W. Chan	Hong Kong University (Hong Kong)
Panos Chrysanthis	University of Pittsburgh (USA)
Maggie Dunham	Southern Methodist University (USA)
Richard Guy	UCLA (USA)
Nen-Fu Huang	National Tsing Hua University (Taiwan)
Anupam Joshi	University of Maryland Baltimore County (USA)
Peter Keleher	University of Maryland (USA)
Dae Young Kim	Chungnam National University (Korea)
John Kubiawicz	UC Berkeley (USA)

X Organization

Victor Lee	City University of Hong Kong (Hong Kong)
Wang-Chien Lee	GTE (USA)
K. S. Leung	Chinese University of Hong Kong (Hong Kong)
Yi-Bing Lin	National Chiao Tung University (Taiwan)
Michael Lyu	Chinese University of Hong Kong (Hong Kong)
K.L. Tan	National University of Singapore (Singapore)
Y.C. Tay	National University of Singapore (Singapore)
Ouri Wolfson	University of Illinois Chicago (USA)
M. H. Wong	Chinese University of Hong Kong (Hong Kong)
Naoaki Yamanaka	NTT Japan (Japan)
Lawrence K. Yeung	City University of Hong Kong (Hong Kong)
Stan Zdonik	Brown University (USA)

Sponsoring Institutions

ACM Hong Kong Chapter
Department of Computing, Hong Kong Polytechnic University
Department of Computer Science, Hong Kong University of Science and Technology
E-Business Technology Institute (ETI), University of Hong Kong

Industrial Sponsors

Hutchison Telecommunications (Hong Kong) Ltd.
Nokia (Hong Kong) Ltd.
Oracle (Hong Kong) Ltd.



Technically Sponsored by

IEEE Technical Committee on Personal Communications

In Cooperation with

ACM SIGMOBILE
IEEE Hong Kong Section Computer Chapter