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Health Information Science

First International Conference, HIS 2012
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Proceedings

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Preface

Welcome to the proceedings of HIS 2012, the First International Conference on Health Information Science, held during April 8–10 in Beijing, China. HIS aims to integrate computer science/information technology with health sciences and services, embracing information science research coupled with topics related to the modelling, design, development, integration, and management of health information systems.

The HIS conference provides a forum for disseminating and exchanging multidisciplinary research results in computer science/information technology and health science and services. It covers all aspects of the health information sciences and the systems that support this health information management and health service delivery. The scope includes (1) medical/health/biomedicine information resources, such as patient medical records, devices and equipment, software and tools to capture, store, retrieve, process, analyze, optimize the use of information in the health domain, (2) data management, data mining, and knowledge discovery (in the health domain), all of which play a key role in decision making, management of public health, examination of standards, privacy and security issues, and (3) development of new architectures and applications for health information systems.

The HIS 2012 program had two eminent keynote speakers, Leonard Goldschmidt from the Department of Veterans Affairs, Palo Alto Health Care System and Stanford University Medical School, USA, and Michael Steyn from Royal Brisbane and Women's Hospital, Australia, one panel discussion on "Medical Devices and Data Processing", and four sections including 15 full papers.

HIS 2012 received 38 submissions from 10 countries and regions. The submissions were carefully reviewed by members of the Program Committee. Based on the reviews, 15 submissions were accepted as full papers. Authors of some selected papers will be invited to submit extended versions to a special issue of the *Health Information Science and System Journal*, published by BioMed Central (Springer). The conference program was of high quality owing to the strong support and commitment of the international Program Committee. We wish to take this opportunity to thank the Program Committee for their dedication and effort in ensuring a high-quality program.

Many colleagues helped toward the success of HIS 2012. They are: Workshop/Panel/Tutor Co-chairs: David Hansen and Guangyan Huang; Local Arrangements Co-chairs: Xiaofeng Meng and Jing Yang; Financial Chair: Jing He; Publication Chair: Guandong Xu; Demo Chair: Chaoyi Pang; Publicity Co-chairs: Haolan Zhang and Huiru Zheng; and Webmasters: Zhi Qiao and Zhangwei Jiang.

We would like to sincerely thank our financial supporters and sponsors. The following organizations generously supported and sponsored HIS 2012: Hebei University of Engineering, Nanjing University of Finance and Economics, National Science Foundation of China, Graduate University of Chinese Academy of Science, and Victoria University, National Natural Science Foundation of China.

Finally, we wish to thank the host organizations, Victoria University and GUCAS-VU Joint Lab for Social Computing and E-Health Research, Graduate University of Chinese Academy of Science, and the local Arrangements Committee and volunteers for the assistance in organizing this conference. The following members helped with the registration, accommodation, and various logistics: Jing Yang, Xun Zhou, Fenhua Li, and Shang Hu.

April 2012

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