Preface

Subhash Bhalla

Graduate School of Computer Science and Engineering,
University of Aizu,
Aizu-Wakamatsu, Fukushima 965-8580, Japan
E-mail: bhalla@u-aizu.ac.jp

Large scale information systems in transportation, banking and public utility services depend on computing infrastructure. Many research efforts are being made in related areas, such as – web-based computing, information accesses by web users, wireless computing and sensor networks. Government agencies in many countries plan to launch facilities in education, healthcare and information support as a part of e-government initiative. In this context, information interchange management has become an active research field. A number of new opportunities have evolved in design and modelling based on new computing needs of the users. Database systems play a central role in supporting networked information systems for access and storage management aspects.

In the same context, the Fifth International Workshop on Databases in Networked Information Systems (DNIS) 2007 was held on October 17–19, 2007 at University of Aizu in Japan. The workshop program included research contributions, and invited contributions. A view of research activity in related areas was provided by special session on the topics. These included, geospatial decision-making, web data management systems, networked information systems – infrastructure and web query and web mining systems. Few of the invited contributions have been contributed by – Dr. Umeshwar Dayal, Professor Divy Agrawal, Professor Masahito Hirakawa, and Professor Krithi Ramamritham. Few of the revised versions of these and other selected contributed manuscripts have been included in this issue.

The manuscripts in this issue focus on large scale query systems and public-utility applications. These begin by introducing a 'Scalable information extraction for web queries'. The paper by Meichun Hsu and Yuhong Xiong, is a pioneering effort in this area of increasing significance.

The follow up paper by Yasuhiko Morimoto is an effort in pattern mining for unevenly distributed data. The manuscript is a significant contribution in an area with few other references. The paper by Paolo Bottoni et al. presents a model technique for improving access for search and query. It focuses on annotated documents. The subsequent paper uses existing research on recommendation systems, and focuses on finding a reference from available books in a library. This manuscript is presented by Takanori Kuroiwa, and Subhash Bhalla. It presents a novel way to use books already available in contrast to finding a new book each time.

Similarly, the manuscript by Peter Alvaro, Dmitriy V. Ryaboy, and Divyakant Agrawal, describes novel system for managing queries in a large data warehouse. It addresses efficient operations for complex query needs. In the same stream, the manuscript by T. Ragunathan, and P. Krishna Reddy, addresses a problem of improving the performance of read-only transactions. It considers a novel approach based on speculation-based protocols. These are a new class of protocols.

Under the network information systems – infrastructure, the manuscript by A. Mondal, S.K. Madria and M. Kitsuregawa, offers a view of improving data availability via an economic lease model in mobile-P2P networks.

Other than introducing the large scale computing applications, manuscripts focus on presenting a complete spectrum of essential components. These are complex problems, infra-structural support and upcoming application in large scale computing. The also present novel designs, and algorithmic aspects of supporting large scale computations for modern applications.