

## Editor's Notes

It is with my pleasure to present you the first issue of the year 2004. The chair message from Tamer Ozsu gives us an overview of the most recent SIGMOD DiSC activities, memberships, and the first SIGMOD/PODS conference to be held outside of North America. The next article is contributed by Rick Snodgrass, the editor-in-chief of ACM TODS, introducing the special issues in ACM TODS. The remaining of this issue consists of six topic sections.

The first section is the part two of the special topic section on Mobile Sensor Network Technology, Sensor Data Processing and Deployment, guest edited by Vijay Kumar. The special topic section is organized into two parts, featuring research work in sensor system infrastructure, sensor data processing (data capture, validation and consistency preservation), and sensor technology deployment. The part one of the special topic section is dedicated to topics ranging from sensor data stream processing, sensor data mining, sensor mobility, sensor data capture and validation, to sensor deployment. The part two of this special topic section consists of seven papers, focusing on issues in designing distributed sensor network architecture, especially security, reliability, recovery in distributed sensor systems. The introduction by the guest editor appeared in the December 2003 issue of the ACM SIGMOD Record.

The rest of this issue contains contributions in regular sections. The *Articles* section presents you with eight interesting research articles. The first article, by Verykios, Bertino, et.al., presents an overview of privacy-preserving data mining through a novel classification hierarchy. The second article, by Helmer et. al., discusses four different core protocols for synchronizing access and modifications of XML documents. The third article, by Voruganti, Menon, Gopisetty, describes the issues and research challenges of using complex networked storage intra-structure in large enterprise systems. The next three articles are dedicated to data base design. The paper, by Bolchini, Schreiber, Tanca, describes a context-award approach to designing very small databases. The article by Antonio Badia can be seen as a response to the previous article appeared in June 2002 issue of the SIGMOD Record, by Rafael Camps Pare. Followed by an article on multi-dimension schema design by Tim Martyns, it describes the advantages and caveats of multidimensional schemes. The next article is contributed by Abdulla, Critchlow, and Arrighi. It describes the scientific simulation data as data streams, and discusses some challenges in handling such data. The last article in this section discusses the problem of identifying out-of-context web pages and rating the relevance of web pages.

The next section is the *Database Principles* column with a contribution by Thomas Schwentick. It describes the query containment problem and compares some of the main algorithmic techniques proposed for XPath query containment.

The *Distinguished DB Profiles* column, edited by Marianne Winslett, presents us an interesting interview with Peter Chen. Peter talks about a number of issues dear to his heart, including the root of the ER model, the need for ER databases, and the ER model in software engineering.

The *Standard* column in this issue entertains us with an article on new features in the new 2003 edition of SQL standard, contributed by Eisenberg, Kulkarni, Michiels, Melton, Zemke.

This issue ends with four interesting workshop reports: the Dagstuhl Seminar on Data Quality on the Web by Gerta, Ozsu, et.al; the NSF workshop on Science of Design for Information Systems by Raghu Ramakrishnan et.al.; the Semantic Integration workshop at the 2nd Semantic Web conference by Doan, Halevy, Noy; the first Geo Sensor workshop by Nittel et. al; and the 9th workshop on database programming language (DBLP), coauthored by G. Lausen and D. Suciu.

I would like to close the editor note by thanking the associate editors who have made contributions to this issue, the guest editor Vijay Kumar, and all authors for their collective efforts and their high quality work. I hope you enjoy these articles as much as I do.

Ling Liu

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