

Editor's Notes

Welcome to the June 2011 issue of the ACM SIGMOD Record, with many interesting articles and a set of news on the Editorial Board side!

The vision paper by Cohen-Boulakia and Leser opens the issue, with a perspective on how users devise, use, search for and interact with scientific workflows. Such processes have become ubiquitous as data produced and consumed by scientific activity increases in volume. However, even as specific tools become gradually known and used within scientific communities, the burden on the user trying to specify a workflow for a specific problem remains high: getting familiar with the workflow tool, the semantic of individual components, figuring out the overall interconnections between modules... The authors make a convincing case that the main way to ease this burden on the user is to improve/add to the ways in which a user may search for existing workflows, incrementally change or adapt them to her own problem. They survey the capabilities of various tools to search for processes matching a specification, and propose avenue for effectively encouraging scientific workflow re-use.

The survey by Wang, Feng, Xue and Song focuses on an important area of “green computing”, namely energy-efficient computing, and more specifically, energy-efficient data management. Energy efficiency is defined as the ratio between the work done, and the power consumed by the computing center doing the work. Several directions in the general area of energy efficiency are listed, such as system simplification (eliminating non-essential components), constructing energy optimizers and reducing peak consumption. With respect to the sub-topic of energy-efficient data management, the authors consider server-side, sensor-side and mobile-context techniques for increasing energy efficiency. The survey ends with a review of some metrics and benchmarks for quantifying this important measure.

The Distinguished Profile column features two interviews in this issue: Laura Haas and Alberto Laender, both reflecting on their rich and interesting careers. It turns out Laura had left school with no intention to work in databases, but the database community was lucky enough to have her work on a series of outstanding IBM projects which have opened fields of work such as data integration (Garlic), or schema mapping (Clio). Laura's musings on management versus child raising will delight all members of our community which happen to be both parents and managers, and especially mothers! Besides his long and successful University professor career, Alberto has also created and sold an extremely successful Brazilian start-up to Google, and he explains the unusual circumstances which, together with the good timing and well-defined focus, lead to their success. Alberto also comments on old and new ways of assessing database (and more generally, computer science) research impact, on the structuring of the Brazilian database community around the SBBD conference, and much more.

The report by Meng, Jin, Cao and Yue outlines the works of the First International Workshop of Flash-Based Systems (FlashDB), held in conjunction with DASFAA 2011. The workshop focused on issues such as transaction processing, energy consumption, indexing, data placement etc. in the context of software systems designed for Flash hardware.

Finally, the report by Bonnet, Manegold et al. describes the results of the 2011 SIGMOD Repeatability and Workability evaluation. In 2011, this evaluation is in its fourth year; the authors report encouraging, yet stable results, and uncover some interesting and unexpected geographic trends in the repeatability results, for which everyone's hypothesis are welcome...

New editors I am happy to announce a set of new arrivals in our editorial board.

The increased output of this month's Distinguished Profile column is partly due to the presence of Vanessa Braganholo from Fluminense Federal University, our new co-editor of the column. Welcome, Vanessa!

After twelve years of service, Leonid is planning his withdrawal from the role of Database Principles editor. Pablo Barceló from the Universidad de Chile is joining us as a new co-editor, to take over from Leonid after a short transition. Welcome, Pablo!

Last but not least, after a period of inactivity, the Industrial Perspective column is re-launched by the arrival of a new editor: Glenn Pauley from Sybase, whose own short editorial appears below. Welcome, Glenn!

Your contributions to the Record are welcome via the RECESS submission site (<http://db.cs.pitt.edu/recess>). Prior to submitting, be sure to peruse the Editorial Policy on the SIGMOD Record's Web site (<http://www.sigmod.org/publications/sigmod-record/sigmod-record-editorial-policy>).

Ioana Manolescu

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From the new editor of the SIGMOD Industrial Perspective column

A tremendous asset to the database systems research community is the symbiotic relationship between academia and industry. Historically, that collaboration has resulted in a myriad of joint research projects, research prototypes, and commercial successes. Evidence of that relationship continues today, particularly so with the recent spawning of numerous commercial initiatives such as Hadapt, VoltDB, CouchDB, Voldemort, and MongoDB, to name but a few.

The intent behind SIGMOD Record's Industry Perspectives section is to inform researchers regarding industry trends, commercial product implementations, and the broader practice of data management, so that the database research community can better formulate research problems of practical significance.

Topics of interest include, but are not limited to:

- surveys of data management practice;
- experience papers describing lessons learned from applying research results in an industrial context;
- data management standards;
- technical papers on commercial data management products, interfaces, and query languages;
- papers describing the requirements of novel applications;
- position papers; and
- papers from industrial researchers on their views of important research problems.

As the new SIGMOD Record Associate Editor for Industry Perspectives, I hope to follow Len Seligman's efforts as Associate Editor over the previous decade, and continue to contribute to the dialog between industrial and academic members of the database research community.

We encourage paper submissions on any topic along these lines. Industry Perspectives will be an ongoing feature of SIGMOD Record, and we welcome submissions at any time. Submissions should follow the formatting guidelines of SIGMOD Record and should be submitted electronically, in PDF format, to the RECESS system. Contributing authors maintain their copyright to articles published in SIGMOD Record. Paper proposals, inquiries, submission ideas, and topic suggestions for the Industry Perspectives section can be sent to Glenn Pauley at paulley@sybase.com.

Glenn Pauley

Sybase, an SAP Company

paulley@sybase.com

Past SIGMOD Record Editors:

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Daniel O'Connell (1971 – 1973)
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Jennifer Widom (1995 – 1996)
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