Editor’s Notes

Welcome to the September 2013 issue of the ACM SIGMOD Record! After the highly successful SIGMOD and PODS 2013 conferences in New York, our community leadership is renewed through the election of the new SIGMOD officers: Donald Kossmann (chair), Anastasia Ailamaki (vice-chair) and Magdalena Balazinska (secretary and treasurer). Congratulations to the newly elected well-known members of our community, in particular to the former Record editor Magda! A word from the chairs follows these notes.

The issue opens with a Database Principles article by Chomicki, Ciaccia, and Meneghetti on skyline queries. Since their original inception in 2001, skyline queries (and algorithms) have enjoyed an enormous popularity, and numerous applications from Web commerce to recommendation (possibly in a social context) and more generally to decision making. This sharp and clear article recalls the basic formal notions behind skyline queries, in particular the notion of Pareto dominance, reviews the main classes of queries and algorithms, discuss skyline query result size, and point to areas of further research, including handling uncertainty and integrating some form of users’ preferences to inform the skyline choice.

The paper by Ceri, Della Valle, Freytag, Palpanas, Pedreschi, and Trasarti illustrates how the mega-modeling approach previously proposed by the authors can be used to support a set of apparently very different data analysis scenarios. Mega-modeling is introduced as a theory and technology of model construction, model search, model composition, reuse and evolution; a design based on mega-modeling consists of an assembly of mega-modules, each of which consists of the successive stages of data preparation, analysis, and evaluation (preparation of the output). The target applications are inspired from the mobile and stream processing contexts; they include individual and collective profiling (through mobility trajectories), outlier detection, sentiment shifting (in micro-post streams) and more.

High-value Web data tables are the focus of the work by Lautert, Scheidt, and Dorneles. The (Web) data management community has taken recent notice of the wealth of well-structured data to be found in table format on the Web, and the authors propose a taxonomy of such tables according to how information is organized within them, including all the “hard-to-handle” aspects such as merged cells etc. The purpose of the taxonomy is to improve the effectiveness of Web table data processing, since each class of table may better handled by specific algorithms. Finally, the authors present a neural network-based Web table classifier of Web tables into these categories.

Andrew Eisenberg reports to us on the new XQuery 3.0 candidate recommendation published by the W3C in January 2013. If you think you missed 2.0, do not worry! 3.0 is the first update after the 2007 1.0 version. Among the novel features, XQuery 3.0 provides support for grouping, a window operator, more general FLWOR expressions, try-catch and higher-order functions. General (“relaxed”) FLWOR expressions are interesting in their resemblance to the “sequential, all in a script” data processing framework of (say) MapReduce or PigLatin. Experience will tell how widely used and adopted will these languages be in the short and medium run, but XQuery (and this has been the case since its early days) certainly does not lack expressive power!

The Systems and Prototype columns features two system descriptions. PAIRSE, by Benslimane, Barhamgi, Cuppens, Morvan, Defude, and Nageba (and many additional authors) is concerned with privacy-preserving composition of services and algorithms in a peer-to-peer context. SYSEO, by Chabane, d’Orazio, Gruenwald, Mohamad and Rey details two components of a software built for endoscopic image processing by physicians. These papers share the characteristic of being about the results of three-years French R&D programs funded by the French national research agency (ANR).
The Profiles columns are basically all remarkable, as they provide the rare opportunity for respected colleagues to open up on their life, career, expectations, hopes and previously (in)famous quotes. Andreas Reuter’s interview featured in this issue still stands out as one of the most lively and informative. The discussion of the weather and its impact on the writing of the classical Transaction Processing book together with Jim Gray is something I feel compelled to give to all my Greek students and post-docs to read, every time they complain about Parisian weather! Andreas tells us that yes, there is a life outside transactions (something that the abovementioned students and post-docs typically do not need explaining). Further, he shares thoughts about his experience of starting the first full English-language, private university in Germany, and also on how he had to withdraw from managing it due to the complexity of handling sponsors, PR, political debates around the project and much more.

Zhou and Sadiq present the data centric research at the University of Queensland, spanning both the the timeline of the department’s history and the breadth of today’s research topics, including trajectory computing, multimedia search, data quality, IT governance, and numerous applications to science and humanities.

Last but not least, two workshop reports close the issue: BIRTE 2012 (Business Intelligence for the Real Time Enterprise) by Castellanos, Dayal and Rundensteiner, and the PhD workshop next to the CIKM conference 2012, by Kacimi, Suchanek and Varde.

As you may have noticed, the RECESS submission Web site has moved from the University of Pittsburgh where it had been installed and maintained during the tenure of the previous Editor-in-Chief, Alex Labrinidis, to an ACM-hosted Web site. I take the opportunity to thank Alex, the ACM IT support staff, Curtis Dyreson and especially my former PhD student Asterios Katsifodimos for ensuring a smooth transition! Your submissions to the Record are now welcome via the submission site:

http://sigmod.hosting.acm.org/record


Ioana Manolescu
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Past SIGMOD Record Editors:

Harrison R. Morse (1969)  
Randall Rustin (1974-1975)  
Douglas S. Kerr (1976-1978)  
Jon D. Clark (1984 – 1985)  
Margaret H. Dunham (1986 – 1988)  
Michael Franklin (1996 – 2000)  
Mario Nascimento (2005 – 2007)  

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1 Which is to say, basically every day, except for August holidays, when they’re back home…