Editor's Notes

Welcome to the September 2016 issue of the ACM SIGMOD Record!

This issue opens with the Surveys Column featuring two articles. The first article, by Saleh et al., addresses data encryption. With widespread adoption of cloud computing, data encryption has become vitally important to many applications that contain sensitive user data. However, standard encryption schemes do not allow computation over encrypted data without access to the decryption key, which raises the potential of leaking the key if the server becomes compromised. A better approach is to develop techniques that allow computation directly on encrypted data, although it is technically more challenging. This article focuses on the latter approach: it surveys the applications, tools, building blocks, and approaches that can be used to directly process encrypted data without decrypting it. It further discusses the limitations of today's techniques and open issues for future research.

The second survey article, by Le and Ling, surveys keyword search over XML documents. The article classifies existing works for XML keyword search into three main types: tree-based, graph-based, and semantics-based approaches. For each type of approach, it provides an in-depth comparison of various techniques, and further identifies the common limitations among these techniques.

The Distinguished Profiles column features Carlo Zaniolo, Professor in Knowledge Science at the University of California Los Angeles. In this interview, Carlo talks about his passion for relational databases and logic, his early career at Microelectronics and Computer Technology Corp. (MCC), and the later transition to academia. In particular, Carlo gives valuable advice to fledging and mid-career database researchers: “If you are young, go for the new things. But, if later on, you find key technical problems that are very interesting, as a researcher you should have the pride to keep working on them.”

The Reports column features a report on the Third International Workshop on Exploratory Search in Databases and the Web (ExploreDB 2016), held in conjunction with SIGMOD 2016 in San Francisco, USA. The workshop program consisted of two keynote talks from industry and six research papers, covering a wide range of interesting topics such as large-scale data discovery, interactive learning based exploration, and multi-diagram navigation.

Finally, this issue closes with call for papers and participation for ICDE 2017 and EDBT 2017.

On behalf of the SIGMOD Record Editorial board, I hope that you enjoy reading the September 2016 issue of the SIGMOD Record!

Your submissions to the SIGMOD Record are welcome via the submission site: http://sigmod.hosting.acm.org/record

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