Editor’s Notes

Welcome to the June 2023 issue of the ACM SIGMOD Record!

This issue starts with the Database Principles column featuring an article by Bertossi, Kimelfeld, Livshits, and Monet. The authors overview recent results on the application of the Shapley value measure to database tasks. The measure can be used to evaluate the contribution of tuples to query answers and the degree of data inconsistency with respect to integrity constraints. The results reported in the article are applicable to quantifying the contribution of individual data items to conclusions drawn from the data, as part of the explanation of what led to these conclusions. The authors present computational-complexity results in this space and outline directions of future work.

The Surveys column presents an article by Khan on knowledge-graph querying. The problem of knowledge-graph querying is critical in web search, question answering, semantic search, personal assistants, fact checking, and recommendation. One of the aims of the article is to unite different interdisciplinary topics and concepts that have been developed for knowledge-graph querying. The article also identifies important challenges in knowledge-graph querying that have received less attention from the data-management community, and outlines potential opportunities for future research.

The Reminiscences on Influential Papers column features contributions by Ashraf Aboulnaga and Kian-Lee Tan.

The Advice to Mid-Career Researchers column features a contribution by Qiong Luo entitled "Mid-Career Academics: What I Have Learned or Wish I Had Known." The article shares the author’s perspective on defining research focus, having a connected thread of research throughout the career, cross-area collaborations, advising students, service, and life outside work.

The DBrainstorming column, whose goal is to discuss new and potentially controversial ideas that might be of interest and potentially of benefit to the research community, presents an article by Crooks. Starting with the premise that modern data processing and storage always straddle trust domains, the article outlines challenges in efficient data sharing across trust domains and discusses possible technical solutions for guaranteeing data integrity in distributed scenarios.

The Reports column in this issue features four articles. The first article, by Amer-Yahia and colleagues, presents diversity and inclusion initiative (DEI) activities that took place in database conferences in 2022. The authors discuss the latest achievements in this space in specific conferences, and outline the DEI efforts going forward.

The second article in the Reports column, by De Angelis and colleagues, reports the authors’ experience in introducing participants in the SIGMOD programming contest to entity-resolution tasks in the years 2020 through 2022. The authors share the executive decisions they made in the contest in these years, and discuss the lessons learned.

The third article in the Reports column, by Mildenberger and colleagues, looks into issues in training data scientists in the context of practical needs of data-science jobs. The authors shed light on the issues by evaluating a survey of people who have been trained in a continuing-education program in data science in Switzerland. The results of the survey highlight the importance of the profession and of continuing education in the field.
The final article in the column is a report by Olteanu on the 2022 workshop on factorized databases. Factorized databases are a rich area of study that offers technical challenges and solutions for theoretical and systems research. The workshop was the first effort to bring together researchers who work on the theory, systems, and applications of factorized databases. The article reports on the projects showcased in the workshop, and outlines directions of future work.

The issue closes with an announcement from the Computing Research Association on the Early and Mid Career Mentoring workshops for those in underserved groups in computing who are academic researchers, teaching track, and their industry and government-lab equivalents. The workshops are to be held in Chicago IL in November 2023.

On behalf of the SIGMOD Record Editorial board, I hope that you enjoy reading the June 2023 issue of the SIGMOD Record!

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https://mc.manuscriptcentral.com/sigmodrecord

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