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LETTER FROM THE EDITORS IN CHIEF

We are pleased to present the eighth issue of PVLDB, Volume 15. This issue contains 17 papers in total including 10 regular research papers, 2 scalable data science (SDS) papers, and 5 experiments analysis & benchmark (EA&B) papers. A broad range of topics are covered in this issue including distributed database systems, machine learning & applied AI for data management, graph data management, database performance, database engines, data quality, and data mining.

For the first paper in this issue, Chen et al. present experimental studies of summary-based cardinality estimators in graph database management systems. Next, Alhazmi et al. present a benchmark for chasing vs. query-rewriting. Liao et al. propose efficient solutions for distributed D-core decomposition problem over large directed graphs. Chen et al. study the maximal biclique enumeration problem on large sparse bipartite graphs and propose efficient algorithms. Zhou et al. propose a general framework for temporal GNN training on billion-scale graphs. Yuan et al. study the distributed learning problem of fully connected neural networks using independent subnet training. Burckhardt et al. introduce Netherite, a novel architecture for executing serverless workflows on an elastic cluster. Huynh et al. present Endure, a new paradigm for tuning LSM trees in the presence of workload uncertainty. Li et al. introduce an I/O-efficient disk-based graph system for scalable second-order random walk of large graphs. Vaidya et al. present Sparse Numerical Array-Based Range Filters (SNARF), a learned range filter that efficiently supports range queries for numerical data. Chen et al. propose DLCR to support efficient label-constrained reachability queries on large dynamic graphs. Zhao et al. propose a tree transformer model for query plan representation. Lee et al. investigate index checkpoints for instant recovery in in-memory database systems. Esmailoghli et al. introduce MATE, a table discovery system that leverages a novel hash-based index. Paparrizos et al. present an end-to-end benchmark suite for univariate time-series anomaly detection. Leone et al. comprehensively re-evaluate neural methods for entity alignment. Paganelli et al. perform a multi-facet analysis of the components of pre-trained and fine-tuned BERT architectures applied to entity matching.

All the papers in this issue will be presented at the 48th International Conference on Very Large Data Bases, 2022, in Sydney. We sincerely thank all the authors for submitting their work and all the reviewers for their outstanding service in reviewing the submissions. We hope that the reader will find this volume enjoyable.

Fatma Özcan, Juliana Freire, and Xuemin Lin
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