



# Proceedings of the VLDB Endowment

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## LETTER FROM THE EDITORS IN CHIEF

We are pleased to present the sixth issue of Volume 19 of the *Proceedings of the VLDB Endowment (PVLDB)*.

This sixth issue of Volume 19 includes 25 papers spanning the following primary subject areas: Data Mining and Analytics (1); Data Privacy and Security (2); Database Engines (8); Graph and Network Data (5); Information Integration and Data Quality (2); Machine Learning, AI, and Databases (5); Specialized and Domain-Specific Data Management (1); and Text and Semi-Structured Data (1). Together, these papers represent a broad and diverse cross-section of the areas addressed by PVLDB.

This issue highlights several research directions that continue to shape the evolution of data management systems. Notably, foundational advances in database engines remain central. Several papers revisit core problems in query processing and optimization, including learned and interpretable optimizers, cardinality estimation, join execution, and predicate transfer. Other contributions address storage and system architecture challenges, such as adaptive storage for HTAP systems, secure and decoupled key-value storage architectures, and data lake architectures. Together, these works emphasize that sustained progress in system efficiency, robustness, and adaptability remains critical to supporting both traditional and emerging workloads.

At the same time, a prominent theme is the deepening integration between database systems and machine learning, particularly in the context of LLMs and AI-driven automation. The papers in this issue explore a wide spectrum of this interaction, including LLM-enhanced database operations and tuning, benchmark design and analysis for text-to-SQL and AI workloads, coreset selection for efficient instruction tuning, and system support for GNN training and semantic search. These contributions reflect a growing recognition that data systems are not only supporting AI workloads, but are increasingly being redesigned to incorporate AI techniques as core components.

Graph and network data management also features prominently in this issue, with contributions spanning temporal graph indexing, graph database testing and validation, structural normalization, and community analysis over directed graphs. In addition, work on vector search and high-dimensional data highlights the continued importance of specialized data processing techniques.

Complementing these system advances, several papers emphasize methodological rigor, including benchmark quality, evaluation reliability, and reproducibility, underscoring the community's commitment to building reliable and trustworthy data systems.

We would like to thank the authors for their high-quality submissions, the reviewers and associate editors for their careful and thorough evaluations, and the PVLDB publication team for their continued support in producing this issue.

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Editors-in-Chief of PVLDB Vol. 19  
Program Chairs for VLDB 2026