



# Proceedings of the VLDB Endowment

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## LETTER FROM THE EDITORS IN CHIEF

It is our pleasure to present the twelfth (August 2025) issue of PVLDB Volume 18. While the first eleven issues covered research track papers accepted to PVLDB and presented at the VLDB 2025 Conference in London, Issue 12 includes all other contributions, which were also part of the VLDB 2025 program: the VLDB Endowment Award talks, the Keynote talks, Panels, Workshops, as well as peer-reviewed Industrial papers, Demonstrations, and Tutorials.

The Industrial Track of VLDB 2025 invited papers on industrial products and services as well as industrial prototypes. Our call for papers discouraged submission of academic projects that are well served by the research and the demonstration tracks of the conference. Unlike past years, we had only a “light” revision round intended primarily to improve presentation. We accepted 34 papers from among the 107 papers that were submitted. Each paper was reviewed by at least two members of the industrial track program committee and some of the papers were assigned additional reviewers as needed. The papers have been organized in six sessions: Distributed Systems, Data Platforms for Analytics, Document/Graph/Vector Databases, Machine Learning/AI & Databases, Transactions & Concurrency Control, and Database Engines.

The Demonstration Track of VLDB 2025 continues to serve as a prominent platform for disseminating and exhibiting the latest innovations in the field of data management. To improve the quality and fairness of the review process at scale, a group of distinguished and diverse researchers was appointed as Associate Editors (AEs), who were entrusted with overseeing review quality and facilitating reviewer discussions. In addition, automated conflict-of-interest (CoI) checks were conducted using the CLOSET System. Furthermore, the review form was specifically tailored to better align with the unique characteristics of demonstration submissions. The track received a substantial number of submissions, totaling 150, 55 of which were accepted for presentation, resulting in an acceptance rate of 36.7%. Each submission was reviewed by a minimum of two expert reviewers under the responsibility of an AE. The candidates for the Best Demonstration Award were proposed by AEs on the basis of the accepted proposals.

The Tutorial Track of VLDB 2025 covers state-of-the-art research, development, and applications in data management or related areas, including interdisciplinary areas. This year, we received 25 submissions, out of which we accepted 13 tutorials. We thank all authors for their contributions to the track. The Tutorial Program Committee was assembled with the diversity of topics and demographics within our community in mind. Each paper was assigned to the committee and subsequently reviewed by the Tutorial Program Chairs for a final decision, in coordination with the Program Committee Chairs and the General Chairs. The accepted proposals cover a wide range of exciting topics, including learned query processing, LLM inference and model management, natural language interfaces to databases, data discovery in data lakes, synthetic data, vector search, graph databases and analytics.

VLDB 2025 has a rich panel program with the following 4 panels:

- Neural Relational Data: Tabular Foundation Models, LLMs... or both? (Moderators: Paolo Papotti, Carsten Binnig; Panelists: Floris Geerts, Johannes Hoffart, Madelon Hulsebos, Fatma Özcan, Gael Varoquaux)
- Beyond Incrementalism: How to Change the World Through Data Systems Research (Moderator: Viktor Leis; Panelists: Anastasia Ailamaiki, Peter Boncz, Badrish Chandramouli, Andy Pavlo)
- Where Does Academic Database Research Go From Here? (Moderators: Eugene Wu, Raul Castro Fernandez; Panelists: Shreya Shankar, Natacha Crooks, Jiannan Wang, Gustavo Alonso, Divesh Srivastava)
- Open Science: A New Paradigm for the Research Lifecycle (Moderator: Yannis Ioannidis; Panelists: Yanlei Diao, Dame Wendy Hall, Wolfgang Lehner, Natalia Manola, Julia Stoyanovich)

VLDB 2025 received 24 workshop proposals. After reviewing the proposals and evaluating their merits based on their history, relevance of topics, and distinctiveness, we selected 14 high-quality workshops (8 x full-day and 6 x half-day). Like previous years, we erred on the side of accepting a larger number of workshops to ensure a good diversity of topics and allow new and revived workshops to establish themselves with sufficiently many submissions. This year’s conference program included the following workshops:

Monday, September 1:

- ADMS: 16th International Workshop on Accelerating Analytics and Data Management Systems Using Modern Processor and Storage Architectures (Chairs: Rajesh Bordawekar, Tirthankar Lahiri)
- AIDB: 6th International Workshop on Applied AI for Database Systems and Applications (Chairs: Thaleia Doudali, Subru Krishnan, Umar Farooq Minhas)
- LLM+Graph: 2nd International Workshop on Data Management Opportunities in Bringing LLMs with Graph Data (Chairs: Yixiang Fang, Arijit Khan, Tianxing Wu, Da Yan)
- QDB: 14th International Workshop on Quality in Databases (Chairs: Lisa Ehrlinger, Lorena Etcheverry, Hazar Harmouch)
- TPCTC: 17th TPC Technology Conference on Performance Evaluation and Benchmarking (Chairs: Raghunath Nambiar, Meikel Poess)

Friday, September 5:

- CDMS: 3rd International Workshop on Composable Data Management Systems (Chairs: Satyanarayana R. Valluri, Mohamed Zait)
- DaSH: 6th Workshop on Data Science with Human in the Loop (Chairs: Eduard Dragut, Yunyao Li, Lucian Popa, Kun Qian, Sherry Tongshuang Wu)
- DATAI: 2nd International Workshop on Data-driven AI (Chairs: Nan Tang, Hongzhi Wang, Lei Cao, Chengliang Chai, Xiaou Ding)
- DEC: 3rd Data Economy Workshop (Chairs: Santiago Andrés, George Konstantinidis)
- Guide-AI: 2nd Workshop on Governance, Understanding, and Integration of Data for Effective and Responsible AI (Chairs: Babak Salimi, Sainyam Galhotra)
- LLM+Spatial: 1st Workshop on Large Language Models for Spatial-rich Data Management (Chairs: Cheng Long, Bernhard Seeger, Yongxin Tong, Jianqiu Xu)
- LSGDA: 4th International Workshop on Large-Scale Graph Data Analytics (Chairs: Wenjie Zhang, Ying Zhang, Wentao Li, Dong Wen, Zhengyi Yang)
- LS-NSL: 1st Workshop on New Ideas for Large-Scale Neurosymbolic Learning Systems (Chairs: Efthymia Tsamoura, Pablo Barceló, Jacopo Urbani)
- TaDA: 3rd International Workshop on Tabular Data Analysis (Chairs: Vasilis Efthymiou, Oktie Hassanzadeh, Sainyam Galhotra, Ernesto Jiménez-Ruiz)

The 2025 edition of VLDB's PhD Workshop features 15 student presentations, a keynote by Prof. Gerhard Weikum on "Adventure and Beauty in Data Systems Research", and a panel discussion.

VLDB 2025 features 3 Keynote talks:

- Alphabets, Grammars, Calculators, and the End of Hand-Crafted Systems (Prof. Stratos Idreos, Harvard University)
- Bridging Disciplines in Data Management Research to Solve Complex Data Problems (Prof. Juliana Freire, New York University)
- Bringing the Operational and Analytical Worlds Together with Lakebase (Prof. Matei Zaharia, University of California Berkeley and Databricks)

Besides the Best Paper and Best Demonstration awards announced during the conference, VLDB 2025 features 3 VLDB Endowment awards with invited talks in the program:

- 2025 VLDB Test of Time Award: Viktor Leis (TU Munich), Andrey Gubichev (TU Munich), Atanas Mirchev (TU Munich), Peter Boncz (CWI), Alfons Kemper (TU Munich), Thomas Neumann (TU Munich) for their VLDB 2015 paper "How Good Are Query Optimizers, Really?"
- 2025 VLDB Women in Database Research Award: Angela Bonifati (Lyon 1 University) for "pioneering contributions in graph databases, and leadership in the international database community"
- 2025 VLDB Early Career Research Contribution Award: Xiangyao Yu (University of Wisconsin-Madison) for "significant contributions in scalable transaction management"

In closing, we wish to collectively express our deep gratitude to all members of various program committees as well as our proceedings chairs who worked tirelessly in the past year to ensure the timely and smooth publication of PVLDB Volume 18.

Themis Palpanas and Nesime Tatbul

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