



# Proceedings of the VLDB Endowment

Volume 13, No. 12 – August 2020

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PVLDB – Proceedings of the VLDB Endowment

Volume 13, No. 12, August 2020.

PVLDB is indexed in Scopus (Elsevier) as well as covered by the following Clarivate Analytics services:

- Science Citation Index Expanded (also known as SciSearch®)
- Journal Citation Reports/Science Edition, and
- Current Contents®/Engineering Computing and Technology

All papers published in this issue will be presented at the 46th International Conference on Very Large Data Bases, Tokyo, Japan, 2020.

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Volume 13, Number 12, August 2020

Pages i – xvi and 2801 - 3516

ISSN 2150-8097

Available at: <http://www.pvldb.org> and <https://dl.acm.org>.

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## LETTER FROM THE EDITORS IN CHIEF

The Proceedings of the VLDB Endowment (PVLDB) provides a high-quality journal publication service to the data management research community. Each volume offers twelve monthly submission deadlines on the first day of each month and a quick, six week reviewing cycle. This publication model was pioneered by PVLDB and combines a journal-style reviewing process, which includes a three-month revision cycle, with the agility and visibility provided by rapid on-line publication, and presentation at the annual VLDB conference.

PVLDB attracts many submissions spanning diverse data management topics, and the PVLDB reviewing process is implemented by a large team of dedicated researchers. The Review Board of PVLDB Volume 13 consists of 186 expert researchers, and reviewing is coordinated by 18 Associate Editors. Review Board members provide timely (within a 3-week deadline) high-quality reviews, and participate actively in online discussions led by the Associate Editors for each paper. When needed, the Associate Editors together with the Editors-in-Chief solicit additional reviews from external experts. We give special thanks here to those additional reviewers who in most cases need to complete their expert reviews on a very short notice.

Most of the accepted papers go through a revision process that requires a second round of reviews after the authors have addressed an initial set of issues and concerns raised by the reviewers during the first round. Some papers are further accepted with shepherding, which means that one of the reviewers works with the authors to address a final set of comments.

This is the twelfth issue of the thirteenth volume of PVLDB. This issue features 95 papers, all associated with the VLDB'20 conference: 51 demonstrations, 31 industrial track papers, six tutorials, three invited papers for the three VLDB Endowment awards, three invited papers for the three keynote talks, and one panel abstract.

The 51 accepted demonstrations cover topics such as query optimization at all levels, advanced applications such as explanation and causality on relational databases, and a variety of works studying the interplay between machine learning and scalable data management. Knowledge base management, news verification and fact-checking, as well as three tools for monitoring an epidemic such as the Covid one are also part of this year's selection.

The industrial track at VLDB 2020 accepted 31 papers from a total of 69 submissions; 4 of these papers were accepted directly and 27 papers were accepted after a revision phase. These works, reported by large and small companies from around the world, showcase the diversity of industrial research on analytical query processing, benchmarking, blockchain, cloud systems, data storage, graph systems, HTAP, indexing, machine learning systems, natural language processing, performance tuning, provenance, query optimization, semi-structured data, time series, transaction processing and views.

This issue also includes descriptions of the six tutorials presented at the VLDB'20 conference. Those tutorials covered six timely and exciting topics: permissioned blockchain technology, robust query processing techniques, data collection and quality for deep learning, similarity query processing (for high-dimensional data), table extraction/understanding techniques, and fairness in evaluating and scoring data.

This issue further includes three invited papers for the three VLDB Endowment awards: The 2020 VLDB Early Career Research Contribution Award. The award this year went to Prof. Meihui Zhang for contributions to cleaning, integration and analysis techniques for healthcare data, and deployment of those techniques in hospitals. The second award is the 2020 VLDB Women in Database Research Award, which went to Prof. Anastasia Ailamaki for pioneering research on the interaction between hardware micro-architecture and database engine performance. Finally, the 2020 VLDB Test of Time Award went to the PVLDB Vol 3 paper entitled "Dremel: interactive analysis of web-scale datasets".

Three keynote speakers were invited to deliver talks at the VLDB'20 conference and invited papers associated with those talks are included in this issue. Prof. Dan Olteanu spoke on "The Relational Data Borg is Learning". Prof. Julia Stoyanovich talked about "Responsible Data Management" and Prof. Masaru Kitsuregawa presented "Out-of-order Execution of Query Processing and New Advances in COVID-19 Information".

Finally, the VLDB'20 conference also included a panel entitled "Panel - Winds from Seattle: Database Research Directions", and an abstract for the panel is included in this issue.



These papers will be presented at the 46th International Conference on Very Large Data Bases (PVLDB 2020), originally planned to be held in Tokyo, Japan during August 31 to September 4, 2020 but now to be held online due to the coronavirus pandemic.

We hope that the readers will find the selected papers engaging, and thought provoking. We also hope that the selected papers will provide valuable insights and inspire novel systems contributions and follow-up research.

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Magdalena Balazinska and Xiaofang Zhou

PVLDB Volume 13 Editors in Chief