

BAILU DING

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Google Scholar <https://scholar.google.com/citations?user=NQiXPboAAAAJ>

EDUCATION

2010-2016 **Cornell University**
PhD Candidate · Department of Computer Science
Research Area: Database · Advisor: Prof. Johannes Gehrke

2010-2013 **Cornell University**
Master of Science in Computer Science

2006-2010 **Fudan University**
Bachelor of Science · GPA: 3.7/4.0. Rank: 3/122 · Department of Computer Science

WORK EXPERIENCE

2016.7-present **Principal Researcher, MICROSOFT RESEARCH — Redmond, WA**

SELECTED PUBLICATIONS

Bailu Ding, Surajit Chaudhuri, Johannes Gehrke, Vivek Narasayya, *DSB: A Decision Support Benchmark for Workload-Driven and Traditional Database Systems*, Proceedings of the VLDB Endowment 2021

Bailu Ding, Surajit Chaudhuri, Vivek Narasayya, *Bitvector-aware Query Optimization for Decision Support Queries*, ACM SIGMOD/PODS International Conference on Management of Data 2020

Lin Ma, Bailu Ding, Sudipto Das, Adith Swaminathan, *Active Learning for ML Enhanced Database Systems*, ACM SIGMOD/PODS International Conference on Management of Data 2020

Bailu Ding, Sudipto Das, Ryan Marcus, Wentao Wu, Surajit Chaudhuri, Vivek Narasayya, *AI Meets AI: Leveraging Query Executions to Improve Index Recommendations*, ACM SIGMOD/PODS International Conference on Management of Data 2019

Bailu Ding, Lucja Kot, Johannes Gehrke, *Improving Optimistic Concurrency Control Through Transaction Batching and Operation Reordering*, Proceedings of the VLDB Endowment 2019

Chi Wang, Bailu Ding, *Fast Approximation of Empirical Entropy via Subsampling*, SIGKDD Conference on Knowledge Discovery and Data Mining 2019

Bailu Ding, Sudipto Das, Wentao Wu, Surajit Chaudhuri, Vivek Narasayya, *Plan Stitch: Harnessing the Best of Many Plans*, Proceedings of the VLDB Endowment 2018

Philip A. Bernstein, Sudipto Das, Bailu Ding, Markus Pilman, *Optimizing Optimistic Concurrency Control for Tree-Structured, Log-Structured Databases*, ACM SIGMOD/PODS International Conference on Management of Data 2015

Sudip Roy, Lucja Kot, Gabriel Bender, Bailu Ding, Hossein Hojjat, Christoph Koch, Nate Foster, Johannes Gehrke, *The Homeostasis Protocol: Avoiding Transaction Coordination Through Program Analysis*, ACM SIGMOD/PODS International Conference on Management of Data 2015

Bailu Ding, Jiang-Ming Yang, Chong Wang, Rui Cai, Zhiwei Li, Lei Zhang, *Who Talks to Whom: Modeling Latent Structures in Dialogue Documents*, In NIPS 2009 Workshop on Applications for Topic Models: Text and Beyond

PATENTS

Bailu Ding, Surajit Chaudhuri, Vivek Narasayya, *Transforming queries using bitvector aware optimization*, US Patent App. 16/917,489

Bailu Ding, Sudipto Das, Ryan Marcus, Lin Ma, Adith Swaminathan, Surajit Chaudhuri, Vivek Narasayya, *Leveraging Query Executions to Improve Index Recommendations*, US Patent 11,138,266

Bailu Ding, Sudipto Das, Wentao Wu, Surajit Chaudhuri, Vivek Narasayya, *Execution Plan Stitching*, US Patent 10,810,202

SERVICES

Program co-chair: SMDB@ICDE 2022-2023

Selected program committee: VLDB 2020-2025, SIGMOD 2020-2025, ICDE 2022, NeurIPS 2021, ICML 2020-2022, SoCC 2021-2022, CIKM 2017

AWARDS

Amit Singhal Fellowship, Cornell University, 2010

ACM International Collegiate Programming Contest World Finals, 13th Place, 2008

ACM Asia Programming Contest, Nanjing, China, Champion, 2007

ACM Asia Programming Contest, Dhaka, Bangladesh, Second Place, 2007