Jialin Ding

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EDUCATION

Massachusetts Institute of Technology

2018-Present

PhD, Computer Science

Stanford University

2014 - 2018

Bachelor of Science with Distinction, Electrical Engineering Minor in Economics

PUBLICATIONS Learning Multi-dimensional Indexes. Vikram Nathan*, Jialin Ding*, Mohammad Alizadeh, Tim Kraska. SIGMOD 2020.

> LISA: Towards Learned DNA Sequence Search. Darryl Ho, Jialin Ding, Sanchit Misra, Nesime Tatbul, Vikram Nathan, Vasimuddin Md and Tim Kraska. NeurIPS Workshop on Systems for ML 2019. Oral Presentation.

> Learning Multi-dimensional Indexes. Vikram Nathan*, Jialin Ding*, Mohammad Alizadeh, Tim Kraska. NeurIPS Workshop on ML for Systems 2019. Oral Presentation.

> SageDB: A Learned Database System. Tim Kraska, Mohammad Alizadeh, Alex Beutel, Ed Chi, Jialin Ding, Ani Kristo, Guillaume Leclerc, Samuel Madden, Hongzi Mao and Vikram Nathan. CIDR 2019.

A Machine-compiled Database of Genome-wide Association Studies.

Volodymyr Kuleshov, Jialin Ding, Christopher Vo, Braden Hancock, Alexander Ratner, Yang Li, Christopher R, Serafim Batzoglou and Michael Snyder Nature Communications 2019.

Moment-Based Quantile Sketches for Efficient High Cardinality Aggregation Queries. Edward Gan, Jialin Ding, Kai Sheng Tai, Vatsal Sharan and Peter Bailis. VLDB 2018.

Efficient Mergeable Quantile Sketches using Moments. Edward Gan, Jialin Ding, Peter Bailis. SysML 2018. Extended Abstract.

MacroBase: Prioritizing Attention in Fast Data. Firas Abuzaid, Peter Bailis, Jialin Ding, Edward Gan, Samuel Madden, Deepak Narayanan, Kexin Rong and Sahaana Suri. ACM Transactions on Database Systems 2018.

A Machine-Compiled Database of Genome-Wide Association Studies.

Volodymyr Kuleshov, Jialin Ding, Braden Hancock, Alexander Ratner, Christopher Re, Serafim Batzoglou and Michael Snyder. 25th Conference on Intelligent Systems for Molecular Biology (ISMB) 2017. Short Paper.

INDUSTRY EXPERIENCE

Research Intern, Microsoft Research, Redmond

Summer 2018

• Implemented and evaluated an updatable learned index structure for range queries.

Software Engineer Intern, Google

Summer 2016

- Worked on Google Safe Browsing.
- Implemented a MapReduce pipeline to integrate Chrome browser incident data into the evaluation of user downloads.

Software Engineer Intern, Thumbtack

Summer 2015

• Worked on SEO, automatic text generation, and recommendation systems.

FELLOWSHIPS AND AWARDS

- NSF Graduate Research Fellowship Program, Honorable Mention, 2018
- MIT Jacobs Presidential Fellowship, 2018