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

ALEX: An Updatable Adaptive Learned Index. Jialin Ding, Umar Farooq Minhas, Jia Yu, Chi Wang, Jaeyoung Do, Hantian Zhang, Yinan Li, Badrish Chandramouli, Johannes Gehrke, Donald Kossmann, David Lomet and Tim Kraska. *SIGMOD 2020.*

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

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