

JINYANG LI

Computer Science and Engineering, University of Michigan, Michigan, USA
jinyli@umich.edu | <https://JinyangLi01.github.io>

EDUCATION

University of Michigan, Ann Arbor

Ph.D. candidate, Computer Science and Engineering

Advisor: [H. V. Jagadish](#)

Michigan, USA

Sep. 2020 – Present

Peking University

Bachelor of Science, Computer Science and Technology

Beijing, China

Sep. 2016 – Jun. 2020

RESEARCH INTEREST

Responsible data management: fairness, bias, and diversity issues in data management and processing

PUBLICATIONS

1. **Jinyang Li**, Yuval Moskovitch, Julia Stoyanovich, H. V. Jagadish
Query Refinement for Diversity Constraint Satisfaction
Under review
2. Yuval Moskovitch, **Jinyang Li**, H. V. Jagadish
Detection of Groups with Biased Representation in Ranking
Under review
3. Yuval Moskovitch, **Jinyang Li**, H. V. Jagadish
Bias analysis and mitigation in data-driven tools using provenance
Proceedings of the 14th International Workshop on the Theory and Practice of Provenance, 2022
4. **Jinyang Li**, Yuval Moskovitch, H. V. Jagadish
DENOUNCER: detection of unfairness in classifiers
VLDB Demo 2021
5. Yinda Zhang, **Jinyang Li**, Yutian Lei, Tong Yang, Zhetao Li, Gong Zhang, Bin Cui
On-Off Sketch: A Fast and Accurate Sketch on Persistence
VLDB 2021
6. Tong Yang, Haowei Zhang, **Jinyang Li**, Junzhi Gong, Steve Uhlig, Shigang Chen, Xiaoming Li,
HeavyKeeper: An Accurate Algorithm for Finding Top-k Elephant Flows
IEEE/ACM Transactions on Networking (ToN), 2019

RESEARCH EXPERIENCE

Research Assistant, Database Group, University of Michigan

Advisor: Professor H. V. Jagadish

Michigan, USA

Sep. 2020 – Present

- Designed algorithms refining relational queries to satisfy diversity constraints in the result set
- Developed techniques to detect groups with biased representation in a given ranking

Research Assistant, FORWARD Data Lab, UIUC

Advisor: Professor Kevin Chen-Chuan Chang

Illinois, USA

Jun. 2019 – Jul. 2020

- Theoretically proved the lower bound of change-aware order indexing
- Designed an index structure realizing the theoretical optimality to support ordered access of RDBMS

Research Assistant, Network Big Data Lab, Peking University

Advisor: Professor Tong Yang

Beijing, China

Jan. 2019 – Jun. 2019

- Worked on algorithms and data structures for fast and accurate data stream processing and networking measurement.