irenelin@umich.edu https://niceirene.github.io/

YIN LIN

EDUCATION

University of Michigan, Ann Arbor

Ph.D. student in Computer Science and Engineering

Advisor: Prof. H. V. Jagadish

Shanghai Jiao Tong University

B.S. in Computer Science

Sept. 2019 – present

Ann Arbor, MI

Shanghai, China Sept. 2015 – June 2019

RESEARCH INTEREST

Responsible data management; efficient data wrangling and lineage

PUBLICATIONS

Conferences

 Mitigating Subgroup Unfairness in Machine Learning Classifiers: A Data-Driven Approach Yin Lin, Samika Gupta, H. V. Jagadish

To appear in ICDE 2024.

SMARTFEAT: Efficient Feature Construction through Feature-Level Foundation Model Interactions
<u>Yin Lin</u>, Bolin Ding, H. V. Jagadish, Jingren Zhou
CIDR 2024.

• Predicate Pushdown for Data Science Pipelines

Cong Yan, Yin Lin, Yeye He

SIGMOD - Proceedings of the ACM on Management of Data 1 (2), 1-28, 2023 (best paper award)

• On Detecting Cherry-picked Generalizations

Yin Lin, Brit Youngman, Yuval Moskovitch, H. V. Jagadish, Tova Milo

PVLDB - Proceedings of the VLDB Endowment, 15(1): 59-71, 2022.

• Identifying Insufficient Data Coverage in Databases with Multiple Relations

Yin Lin, Yifan Guan, Abolfazl Asudeh, H. V. Jagadish

PVLDB - Proceedings of the VLDB Endowment, 13(11): 2229-2242, 2020.

• R²-Tree: An Efficient Indexing Scheme for Data Center Networks

Yin Lin, Xinyi Chen, Xiaofeng Gao, Bin Yao, Guihai Chen

DEXA - International Conference on Database and Expert Systems Applications, 2018.

Workshops

• OREO: Detection of Cherry-picked Generalizations

Yin Lin, Brit Youngman, Yuval Moskovitch, H. V. Jagadish, Tova Milo

PVLDB - Proceedings of the VLDB Endowment, 15(12): 3570 - 3573, 2022.

• On Structural vs. Proximity-based Temporal Node Embeddings

Puja Trivedi*, Alican Büyükçakır*, Yin Lin, Yinlong Qian, Di Jin and Danai Koutra

KDD MLG - International Workshop on Mining and Learning with Graphs, 2020.

MithraDetective: A System for Cherry-picked Trendlines Detection
Yoko Nagafuchi, Yin Lin, Kaushal Mamgain, Abolfazl Asudeh, H. V. Jagadish, You (Will) Wu, Cong Yu
CoRR, 2020, arXiv/2010.08807.

Journal Articles

• Representation Bias in Data: A Survey on Identification and Resolution Techniques Nima Shahbazi, Yin Lin, Abolfazl Asudeh, H. V. Jagadish

ACM Computing Surveys.

 A Survey on Techniques for Identifying and Resolving Representation Bias in Data Nima Shahbazi, Yin Lin, Abolfazl Asudeh, H. V. Jagadish CoRR, 2022, arXiv/2203.11852.

SELECTED EXPERIENCE

Alibaba Group, Bellevue,

Research Intern, in Data Analytics and Intelligence Lab (DAIL) (Mentor: Bolin Ding) May 2023 - Aug. 2023

Microsoft Research, Redmond,

Research Intern in Data Management, Exploration and Mining (DMX) (Mentor: Cong Yan) May 2022 – Aug. 2022

University of Waterloo,

Research Intern in Software Architecture Group (Advisor: Prof. Meiyappan Nagappan) July 2018 – Oct. 2018

TEACHING EXPERIENCES

CS499, Mathematical Foundations of Computer Science, SJTU

Spring 2018

Teaching Assistant. Instructor: Prof. Dominik Scheder

MENTORSHIP

Yoko Nagafuchi, Senior, University of Michigan Mike Wang, Senior, University of British Columbia

HONORS & AWARDS

SIGMOD best paper award	2023
Rackham Dean's and Named PhD fellowship Full first-year PhD fellowship from the University of Michigan	<i>i</i> 2019
Outstanding Undergraduate in Shanghai Jiao Tong University	2019
Academic Scholarship Awarded to top 10% undergraduates for academic performance at SJTU	2016 - 2018
Meritorious Winner, Mathematical Contest in Modeling twice, top 8% worldwide	2017, 2018
SCSK Scholarship Awarded to 7 computer science undergraduates at SJTU for the academic performance	2018
Chun Tsung Scholar Awarded to 50 undergraduates at SJTU, funded by Nobel Prize owner Tsung-Dao Lee	2016

PROGRAM COMMITTEES

BigData: IEEE International Conference on Big Data, 2024

AIBSD: AAAI Workshop on Artificial Intelligence with Biased or Scarce Data, 2024

CIKM: ACM International Conference on Information and Knowledge Management, 2023, 2024

ICDE: IEEE International Conference on Data Engineering, 2024 (external)