Xiaoying Wang

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Education

Simon Fraser University, Canada

2021.01 -

- · Doctor of Philosophy in Computing Science
- Supervisor: Jiannan Wang

Simon Fraser University, Canada

2019.01 - 2020.12

- Master of Science in Computing Science
- Supervisor: Jiannan Wang

Tongji University, China

2012.09 - 2016.07

- · Bachelor of Engineering in Software Engineering
- · Outstanding Graduates of Shanghai (GPA: 4.7/5.0)

Research & Work Experience

Microsoft Research, USA

2022.05 - 2022.08

Research Intern - Data Systems Research

- · Design algorithms in index tuning problem
- · Conduct experiments and analyze results

ConnectorX, SFU DSL Open Source Project

2021.01 -

Leader, Co-Author & Maintainer

- Subproject of dataprep, a library for loading data from databases to dataframes in both Python and Rust
- For now, support ≥7 databases (5 wire protocols) and 5 dataframes, accelerate Pandas.read_sql by 10x with 3x less memory usage [blog]
- · Has been adopted in popular open source project like polars

An Experimental Study Of Learned Cardinality Estimation, MSc Thesis

2019.09 - 2020.12

Co-First Author & Main Contributor

- · Survey on state-of-the-art learned cardinality estimation research works
- · Conduct comprehensive experiment for comparing 5 learned estimators with 3 databases and 6 traditional methods in both static and dynamic environment
- \cdot Study the bad cases of learned estimators and identify their potential problems in production

Qihoo 360 Technology Co. Ltd., China

2015.07 - 2018.04

C++ Developer of 360 MAX (360 AdExchange)

- · Develop and optimize the performance of the high-concurrency and low-latency advertising bidding platform
- · Owner of the API service
- · Process and analyze logs and investigate new strategies

Publication

ConnectorX: Accelerating Data Loading From Databases to Dataframes

VLDB 2022

Xiaoying Wang*, Weiyuan Wu*, Jinze Wu, Yizhou Chen, Nick Zrymiak, Changbo Qu, Lampros Flokas, George Chow, Jiannan Wang, Tianzheng Wang, Eugene Wu, Qingqing Zhou.

Are We Ready For Learned Cardinality Estimation? *Xiaoying Wang**, *Changbo Qu**, *Weiyuan Wu**, *Jiannan Wang*, *Qingqing Zhou*.

VLDB 2021, Best EA&B Paper Award

Invited Talk

Learned Cardinality Estimation: Are We Ready For It?

LinkedIn, 2021.09

Skills

C/C++, Python, Rust, Java, AWK