

Jiaxin Jiang

Grab-NUS AI Lab, Institute of Data Science
National University of Singapore
jxjiang@nus.edu.sg

Education and Working Experience

- 2011-2015 **B.E.**, *TaiShan College, Shandong University (SDU)*, Shandong, China
Major in Computer Science and Technology; Major GPA: 86.82/100 Ranking: 4/180
- 2015-2016 **RA**, *DB group*, Department of Computer Science, Hong Kong Baptist University
Core module(s): Database (DB), High performance computing (HPC)
- 2016-2020 **PhD**, *DB group*, Department of Computer Science, Hong Kong Baptist University
Core module(s): Database (DB), High performance computing (HPC)
- 2020.10-2021.09 **Postdoc**, *DB group*, Department of Computer Science, Hong Kong Baptist University
Core module(s): Database (DB), High performance computing (HPC)
- 2021.09-Present **Research fellow**, *Grab-NUS AI Lab*, IDS, National University of Singapore
Core module(s): Database (DB), Data Mining (DM), High performance computing (HPC)

Honors

- 2017 **ACM SIGMOD 2017 Best Paper Award**. Joint work with the University of Edinburgh.
- 2017 **VLDB 2017 Best Demo Award**. Joint work with the University of Edinburgh.
- 2017 **ACM SIGMOD Research Highlight Award**. Joint work with the University of Edinburgh.
- 2020 **Research Performance Award**. Department of Computer Science, HKBU.
- 2016-2020 **4-year PhD Studentship**. HKBU.
- 2016-2019 **Excellent Teaching Assistant Performance Award** (3 times), **Teaching Assistant Performance Award** (2 times). Department of Computer Science, HKBU.

Publications

- 2023 **Jiaxin Jiang**, Yuan Li, Bingsheng He, Bryan Hooi, Jia Chen and Johan Kok Zhi Kang: Spade: A Real-Time Fraud Detection Framework on Evolving Graphs. VLDB 2023.
- 2022 Xuankun Liao, Qing Liu, **Jiaxin Jiang**, Xin Huang, Jianliang Xu, and Byron Choi: Distributed D-core Decomposition over Large Directed Graphs, VLDB 2022.
- 2021 **Jiaxin Jiang**, Byron Choi, Jianliang Xu, and Sourav S Bhowmick: A Generic Ontology Framework for Indexing Keyword Search on Massive Graphs (Extended Abstract), ICDE 2021.
- 2021 Lyu Xu, **Jiaxin Jiang**, Byron Choi, Jianliang Xu, and Sourav S Bhowmick: Privacy Preserving Strong Simulation Queries on Large Graphs, ICDE 2021.
- 2021 Xuliang Zhu, Xin Huang, Byron Choi, **Jiaxin Jiang**, Zhaonian Zou, and Jianliang Xu: Budget Constrained Interactive Search for Multiple Targets, VLDB 2021.
- 2020 **Jiaxin Jiang**, Xin Huang, Byron Choi, Jianliang Xu, Sourav S Bhowmick, and Lyu Xu: PPKWS: An Efficient Framework for Keyword Search on Public-Private Networks, ICDE 2020.
- 2019 **Jiaxin Jiang**, Byron Choi, Jianliang Xu, and Sourav S Bhowmick: A Generic Ontology Framework for Indexing Keyword Search on Massive Graphs, TKDE 2019.

- 2018 Xin Huang, **Jiaxin Jiang**, Byron Choi, Jianliang Xu, Zhiwei Zhang, and Yunya Song: PP-DBLP: real-world datasets of public-private collaboration networks on DBLP, ICDM 2018.
- 2017 Wenfei Fan, Yinghui Wu, Jingbo Xu, Wenyuan Yu, **Jiaxin Jiang**, Zeyu Zheng, Bohan Zhang, Yang Cao, and Chao Tian: Parallelizing Sequential Graph Computations. SIGMOD 2017.
- 2017 Wenfei Fan, Jingbo Xu, Yinghui Wu, Wenyuan Yu, and **Jiaxin Jiang**. GRAPE: Parallelizing Sequential Graph Computations. VLDB 2017.
- 2017 Wenfei Fan, Yang Cao, Jingbo Xu, Wenyuan Yu, Yinghui Wu, Chao Tian, **Jiaxin Jiang**, and Bohan Zhang: From Think Parallel to Think Sequential. SIGMOD Record, 2018.
- 2016 **Jiaxin Jiang**, Peipei Yi, Byron Choi, Zhiwei Zhang, and Xiaohui Yu: Privacy-Preserving Reachability Query Services for Massive Networks. CIKM 2016.

Academic Services

PC member: ICDE2024, CIKM2023, CIKM2022, CIKM2021, PAKDD2023, PAKDD2022, PAKDD2021, MUST2020, ADMA2023, AIGC2023

Reviewer: VLDBJ2023, VLDBJ2022, TKDE2022, TKDE2021, TKDE2020, CSUR2023, CSUR2022, CSUR2021, DKE2022, TODS

External reviewer: SIGMOD, VLDB, ICDE, EDBT

Conference Presentations, Implementation and Datasets

- 2022 Spade: A Real-Time Fraud Detection Framework on Evolving Graphs. Available at: <https://github.com/samjjx/Spade>.
- 2020 PPKWS: An Efficient Framework for Keyword Search on Public-Private Networks. Dallas, Texas USA, ICDE 2020, 22 April. Available at: https://www.comp.hkbu.edu.hk/~jxjian/694_ICDE_Jiang.mp4
- 2018 PP-DBLP: Real-world datasets of public-private collaboration networks on DBLP. Available at: <https://github.com/samjjx/pp-data>.
- 2016 Privacy-Preserving Reachability Query Services for Massive Networks. Indianapolis, USA, CIKM 2016, October 24.

Research Interests

1) Distributed graph database systems 2) big data analytics, and 3) Fraud detection.

Teaching

- 2017 COMP7810/COMP4096 Business Intelligence
- 2017-2019 COMP4007 Software Design, Development
- 2019 COMP4007 Software Engineering

Hobbies

Badminton, Jogging, Reading, Coding, Chinese Chess
I won "Shandong University Cup" in 2013. ⇒ <https://rb.gy/nhpy6n>

Technical Skills

- ★★★★★ Java, \LaTeX , Scala, Spark, and GraphX
- ★★★★☆ C/C++, Python, Hadoop, and Giraph