

Yilun Jin | Curriculum Vitae

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Education

- **Ph.D. Student, Dept. of CSE, HKUST** **Hong Kong SAR**
Computer Science and Engineering 9.2019–
Advisor: Prof. Qiang Yang, Prof. Kai Chen.
- **B. S. , School of EECS, Peking University** **Beijing, China**
Computer Science, GPA: 3.7/4.0 9.2015–7.2019
Advisor: Prof. Guojie Song
Selected courses: Advanced Algebra, Mathematical Analysis, Convex Optimization, Compiler Design.
- **B. Economics, National School of Development, Peking University** **Beijing, China**
Economics, GPA: 3.7/4.0 9.2016–7.2019
Selected courses: Intermediate Macro- & Micro-Economics, Econometrics, Financial Economics, Money and Banking, Special Topics on Reform in China
- **University of California, San Diego** **La Jolla, USA**
Exchange Student, GPA: 3.93/4.0 9.2017–12.2017
Courses: Computer Operating System, Machine Learning, Recommender System and Web Mining

Experiences

- **Amazon Search** **Palo Alto, USA**
Applied Science Intern, advised by Dr. Zheng Li 9.2023–12.2023
Research on applications of large language model in information retrieval and recommendation.
- **WeBank** **Shenzhen, China**
Internship, advised by Dr. Lixin Fan 6.2020–12.2020
Research on federated learning, adversarial machine learning, and machine learning privacy.
- **Peking University, China** **Beijing, China**
Research Assistant, advised by Prof. Guojie Song 9.2018–9.2019
Research on a wide range of topics through graph representation learning, including temporal aware, community aware and memory adaptive network embeddings. Several topics on Graph Neural Networks are also involved. See *Publications* for details.

Publications

(* stands for *Equal Contribution*.)

Conference Papers.....

1. **Transferable Graph Structure Learning for Graph-based Traffic Forecasting across Cities**
Yilun Jin, Kai Chen, Qiang Yang 8.2023
 In the 29th SIGKDD Conference on Knowledge Discovery and Data Mining (KDD), 2023.
2. **Selective Cross-city Transfer Learning for Traffic Prediction via Source City Region Re-weighting**
Yilun Jin, Kai Chen, Qiang Yang 8.2022
 In the 28th SIGKDD Conference on Knowledge Discovery and Data Mining (KDD), 2022.
3. **Theoretically Improving Graph Neural Networks via Anonymous Walk Graph Kernels**
Qingqing Long, Yilun Jin*, Yi Wu*, Guojie Song* 4.2021
 In the Web Conference (TheWebConf, a.k.a. WWW), 2021.
4. **Graph Structural-topic Neural Network**
Qingqing Long, Yilun Jin*, Guojie Song, Yi Li, Wei Lin* 8.2020
 In the 26th SIGKDD Conference on Knowledge Discovery and Data Mining (KDD), 2020.
5. **EPNE: Evolutionary Pattern Preserving Network Embedding**
Junshan Wang, Yilun Jin*, Guojie Song, Xiaojun Ma* 6.2020
 In the 24th European Conference on Artificial Intelligence (ECAI), 2020.
6. **GraLSP: Graph Neural Networks with Local Structural Patterns**
Yilun Jin, Guojie Song, Chuan Shi 2.2020
 In the 34th AAAI Conference on Artificial Intelligence, 2020.
7. **Accelerating Privacy-Preserving Machine Learning With GeniBatch**
Xinyang Huang, Junxue Zhang, Xiaodian Cheng, Hong Zhang, Yilun Jin, Shuihai Hu, Han Tian, Kai Chen 5.2024
 To appear in the European Conference on Computer Systems (EuroSys), 2024.
8. **Scalable and Efficient Full-Graph GNN Training for Large Graphs**
Xinchen Wan, Kaiqiang Xu, Xudong Liao, Yilun Jin, Kai Chen, Xin Jin 6.2023
 In the ACM Conference on Management of Data (SIGMOD), 2023.
9. **GraphMSE: Efficient Meta-path Selection in Semantically Aligned Feature Space for Graph Neural Networks**
Yi Li, Yilun Jin, Guojie Song, Chuan Shi, Zihao Zhu, Yiming Wang 2.2021
 In the 35th AAAI Conference on Artificial Intelligence, 2021.
10. **Domain Adaptive Classification on Heterogeneous Information Networks**
Shuwen Yang, Guojie Song, Yilun Jin, Lun Du 7.2020
 In the 29th International Joint Conference on Artificial Intelligence (IJCAI-PRICAI), 2020.
11. **Active Domain Transfer on Network Embedding**
Lichen Jin, Yizhou Zhang, Guojie Song, Yilun Jin 4.2020
 In the Web Conference (TheWebConf, a.k.a. WWW), 2020.
12. **Hierarchical Community Structure Preserving Network Embedding: A Subspace Approach**
Qingqing Long, Yiming Wang, Lun Du, Guojie Song, Yilun Jin, Wei Lin 11.2019
 In the 28th ACM International Conference on Information and Knowledge Management (CIKM), 2019.
Best Research Paper Runner-up
13. **DANE: Domain Adaptive Network Embedding**
Yizhou Zhang, Guojie Song, Lun Du, Shuwen Yang, Yilun Jin 8.2019

In the 28th International Joint Conference on Artificial Intelligence (IJCAI). 2019.

Journal Papers.....

14. **Federated Learning without Full Labels: A Survey**
Yilun Jin, Yang Liu, Kai Chen, Qiang Yang 5.2023
In IEEE Data Engineering Bulletin, 2023
15. **SecureBoost: A Lossless Federated Learning Framework**
Kewei Cheng, Tao Fan, Yilun Jin, Yang Liu, Tianjian Chen, Qiang Yang 5.2021
In IEEE Intelligent Systems, 2021
16. **Deep Convolutional Neural Network based Medical Concept Normalization**
Guojie Song, Qingqing Long, Yi Luo, Yiming Wang, Yilun Jin 9.2020
In IEEE Transactions on Big Data, 2020

Technical and Personal skills

- **Mathematics Background:** Discrete Mathematics, Advanced Algebra, Convex Optimization, Mathematical Analysis, Probability and Statistics.
- **Programming Languages:** C, C++, Python (TensorFlow, PyTorch), Java, L^AT_EX, SQL
- **Language Skills:** Chinese (native speaker), English (proficient with speaking 26 in TOEFL, analytical writing 5.0 in GRE), Japanese & Cantonese (beginner)
 - I take charge of writing in most of the publications listed above.
- **General Skills:** Self motivation. Work well in a team.

Teaching

- **Teaching Assistant**, *Practice of Programming in C++*, Peking University, Spring 2019
- **Teaching Assistant**, *COMP4631: Computer and Communication Security*, The Hong Kong University of Science and Technology, Spring 2020
- **Teaching Assistant**, *COMP5631: Cryptography and Security*, The Hong Kong University of Science and Technology, Fall 2020
- **Teaching Assistant**, *COMP6211G: Federated Learning*, The Hong Kong University of Science and Technology, Spring 2021
- **Teaching Assistant**, *COMP3511: Operating Systems*, The Hong Kong University of Science and Technology, Fall 2021, Fall 2022

Services

- **Vice Local Chair:** APNet 2023.
- **Conference Program Committee Member/Reviewer:**
 - **2020:** TheWebConf (Poster & Demo), ICONIP
 - **2021:** AAAI, IJCAI, NeurIPS, NeurIPS Datasets and Benchmarks Track, ICONIP
 - **2022:** ICLR, IJCAI, ICML, TheWebConf (Poster & Demo), NeurIPS, NeurIPS Datasets and Benchmarks Track, LoG
 - **2023:** AAAI, ICLR, IJCAI, TheWebConf (Industry), KDD, ICML, ECML-PKDD, NeurIPS, NeurIPS Datasets and Benchmarks Track, LoG
 - **2024:** AAAI, ICLR, SDM
- **Journal Reviewer:** IEEE BigData, IEEE T-ITS, Neural Networks, TMLR, Information Fusion, IEEE IoTJ, IEEE TKDE.

- **Secondary Reviewer:**
 - **2020:** AAAI, ACL, NeurIPS
 - **2023:** SIGSPATIAL

Awards

- **Student Travel Award**, *ACM SIGKDD Conference*, 2023.
- **2021 Best Paper Award**, *IEEE Intelligent Systems*, 2021
- **Top Reviewer**, *NeurIPS*, 2022
- **Outstanding Reviewer** (Top 10%), *ICML*, 2022
- **AAAI Student Scholarship**, *AAAI*, 2020
- **Best Research Paper Runner-up**, *CIKM Research Track*, 2019
- **Award for Research Excellence**, *Peking University*, 2018
- **Merit Student**, *Peking University*, 2017
- **Huawei Scholarship**, *Peking University*, 2017
- **Yu Minhong Scholarship for overseas exchange**, *Peking University*, 2017
- **Founder Scholarship**, *Peking University*, 2016
- **Award for Academic Excellence**, *Peking University*, 2016