# Yilun Jin | Curriculum Vitae

Department of CSE, The Hong Kong University of Science and Technology Hong Kong SAR – China

# **Education**

Ph.D. Student, Dept. of CSE, HKUST

Hong Kong SAR

9.2019-

Computer Science and Engineering

Advisor: Prof. Qiang Yang, Prof. Kai Chen.

Beijing, China

B. S., School of EECS, Peking University

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 Stores Foundational AI**

Palo Alto, USA

 $^{\circ}$  Applied Science Intern, advised by Dr. Zheng Li and Dr. Chenwei Zhang

9.2023-4.2024

Research on a benchmark to evaluate LLMs on a wide-range of e-commerce-related applications. With this benchmark, we host the Amazon KDD Cup Competition 2024: Multi-task Online Shopping Challenge for LLMs.

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..... Transferable Graph Structure Learning for Graph-based Traffic Forecasting across 1. Cities Yilun Jin, Kai Chen, Qiang Yang 8.2023 In the 29th SIGKDD Conference on Knowledge Discovery and Data Mining (KDD), 2023. Selective Cross-city Transfer Learning for Traffic Prediction via Source City Region 2. Re-weighting Yilun Jin, Kai Chen, Qiang Yang 8.2022 In the 28th SIGKDD Conference on Knowledge Discovery and Data Mining (KDD), 2022. Theoretically Improving Graph Neural Networks via Anonymous Walk Graph Ker-Qingqing Long\*, **Yilun Jin**\*, Yi Wu\*, Guojie Song 4.2021 In the Web Conference (TheWebConf, a.k.a. WWW), 2021. **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. **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. 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. Accelerating Privacy-Preserving Machine Learning With GeniBatch 7. Xinyang Huang, Junxue Zhang, Xiaodian Cheng, Hong Zhang, Yilun Jin, Shuihai Hu, 5.2024 Han Tian, Kai Chen To appear in the European Conference on Computer Systems (EuroSys), 2024. MDP: Model Decomposition and Parallelization of Vision Transformer for Dis-8. tributed Edge Inference Weiyan Wang, Yiming Zhang, Yilun Jin, Han Tian, Li Chen 12.2023 IEEE International Conference on Mobility, Sensing, and Networking (MSN), 2023. 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. GraphMSE: Efficient Meta-path Selection in Semantically Aligned Feature Space 10. for Graph Neural Networks 2.2021 Yi Li, Yilun Jin, Guojie Song, Chuan Shi, Zihao Zhu, Yiming Wang In the 35th AAAI Conference on Artificial Intelligence, 2021. 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. **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.

#### Hierarchical Community Structure Preserving Network Embedding: A Subspace

#### 13. 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** 

#### 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.....

#### Federated Learning without Full Labels: A Survey

Yilun Jin, Yang Liu, Kai Chen, Qiang Yang In IEEE Data Engineering Bulletin, 2023 5.2023

# SecureBoost: A Lossless Federated Learning Framework

Kewei Cheng, Tao Fan, Yilun Jin, Yang Liu, Tianjian Chen, Qiang Yang In IEEE Intelligent Systems, 2021 5.2021

## Deep Convolutional Neural Network based Medical Concept Normalization

Guojie Song, Qingqing Long, Yi Luo, Yiming Wang, **Yilun Jin**In IEEE Transactions on Big Data, 2020

9.2020

# **Technical and Personal skills**

- o Mathematics Background: Discrete Mathematics, Advanced Algebra, Convex Optimization, Mathematical Analysis, Probability and Statistics.
- o Programming Languages: C, C++, Python (TensorFlow, PyTorch), Java, LATEX, 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.
- o 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.
- o 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, TheWebConf, IJCAI, ICML, KDD
- 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**

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