Yilun Jin | Curriculum Vitae

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

+86-18101885710, +852-65837148 • yilun.jin@connect.ust.hk
kl4805.github.io

Education

- **Ph.D. Student (4th Year), 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

- **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

Conference Papers

1. **Transferable Graph Structure Learning for Graph-based Traffic Forecasting across Cities**
   Yilun Jin, *Kai Chen, Qiang Yang* *8.2023*
   To appear 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. **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.

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. **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.

10. **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.

11. **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

12. **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

13. **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

14. **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

(* stands for *Equal Contribution*.)

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, LaTeX, SQL
- **Language Skills:** Chinese (native speaker), English (proficient with speaking 26 in TOEFL, analytical writing 5.0 in GRE), Japanese (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

- **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
- **Journal Reviewer**: IEEE BigData, IEEE T-ITS, Neural Networks, TMLR, Information Fusion, IEEE IoTJ
- **Secondary Reviewer**:
  - **2020**: AAAI, ACL, NeurIPS

Awards

- **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*