# Yilun Jin | Curriculum Vitae

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

I am currently a PhD student from Department of Computer Science and Engineering, The Hong Kong University of Science and Technology, Hong Kong SAR, advised by Prof. Qiang Yang. My current research interests lie in the field of Federated Learning, including algorithms and privacy & security. I am also interested in information network mining, including Graph Representation Learning, Graph Neural Networks, etc<sup>1</sup>.

#### **Education**

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

Computer Science and Engineering

Hong Kong SAR

9.2019-

Advisor: Prof. Qiang Yang

B. S., School of EECS, Peking University

Beijing, China

9.2015-7.2019

Computer Science, GPA: 3.7/4.0 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**

SenseTime Beijing, China

Research Internship on Video analysis

3.2018-6.2018

Implemented content-aware collaborative filtering based video recommendation algorithm, along with a dataset for video recommendation, consisting both video corpus and interaction data.

University of California, San Diego

La Jolla, USA

Research Intern, advised by Prof. Julian McAuley

7.2018-9.2018

Research intern on deep, visually and temporally aware recommender systems and user preference modeling. Extending existing work *Neural Collaborative Filtering (He and Chua, 2017)* to make it temporally-aware.

Peking University, China

Beijing, China

Research Assistant, advised by Prof. Guojie Song

10.2018-8.2019

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.

<sup>&</sup>lt;sup>1</sup>Last Updated Nov. 2019

#### **Publications**

#### GraLSP: Graph Neural Networks with Local Structural Patterns

<sup>1</sup> **Yilun Jin**, Guojie Song, Chuan Shi

2.2020

To Appear in the Thirty-Fourth AAAI Conference on Artificial Intelligence, 2020.

Hierarchical Community Structure Preserving Network Embedding: A Subspace Approach

Qingqing Long, Yiming Wang, Lun Du, Guojie Song, Yilun Jin, Wei Lin

The 28th ACM International Conference on Information and Knowledge Management (CIKM). ACM, 2019.

Best Paper Runner-Up

DANE: Domain Adaptive Network Embedding

<sup>3.</sup> Yizhou Zhang, Shuwen Yang, Guojie Song, **Yilun Jin** 

8.2019

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

SecureBoost: A Lossless Federated Learning Framework

Kewei Cheng, Tao Fan, **Yilun Jin**, Yang Liu, Tianjian Chen, Qiang Yang

8.2019

The 1st International Workshop on Federated Machine Learning for User Privacy and Data Confidentiality, in conjunction with IJCAI 2019

# **Technical and Personal skills**

- Mathematics Background: Discrete Mathematics, Advanced Algebra, Convex Optimization, Mathematical Analysis, Probability and Statistics.
- o Programming Languages: C, C++, Python (TensorFlow, PyTorch), Java, LATEX, CUDA, SQL
- Language Skills: Chinese (native speaker), English (proficient with speaking 26 in TOEFL, analytical writing 5.0 in GRE)
  - I am the primary writer for all the publications listed above.
- o General Skills: Self motivation. Work well in a team.

## **Teaching**

o **Teaching Assistant**, *Practice of Programming in C++*, Peking University, Spring 2019

#### **Awards**

- o Best Paper Runner-up, CIKM Research Track, 2019
- o 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
- o Award for Academic Excellence, Peking University, 2016

#### Miscellaneous

o Aside from academic activities, I also participate in activities related to civil aviation. I am a distinguished author of civil aviation in *zhihu*, a question-answering website similar to *Quora*. I am also a member of *ACICFG*, a group for caption making of documentary *Air Crash Investigation*, whose works have been published to video websites including *acfun* and *bilibili*.