TIAN XIE

323-449-6235 ⋄ xiet@usc.edu

EDUCATION

University of Southern California, Los Angeles, California, USA *August 2017 - May 2022*
Ph.D. in Electrical and Computer Engineer; Advisor: C.-C. Jay Kuo
M.S. in Computer Science (GPA: 3.6 / 4.0);

- Selected Courses: Machine Learning for Knowledge Extraction; Deep Learning; Machine Learning

Fudan University, Shanghai, China *Sept. 2013 - July 2017*
B.S. in Physics (Major GPA: 3.4 / 4.0);

- Selected courses: C++ Programming; Python Programming; Foundations and Applications of Data Mining

PUBLICATIONS

- **Tian Xie**, Bin Wang, C.-C. Jay Kuo. GraphHop: An Enhanced Label Propagation Method for Node Classification. Under Review, *IEEE Transactions on Neural Networks and Learning Systems*.
- **Tian Xie***, Chaoyang He*, Xiang Ren, Cyrus Shahbi, C.-C. Jay Kuo. L-BGNN: Layer-Wise Training Bipartite Graph Neural Embedding. To be submitted, *IEEE Transactions on Neural Networks and Learning Systems*.

SELECTED PROJECTS

Store Recommendation Based on Customers' Implicit Feedback, InfoLab, USC

- Mining customers shopping implicit interest based on HMM and Graphical Model.
- Based on customers' shopping pattern, feature engineering is applied to build a time-aware recommendation system by using LSTM deep learning models. The model improved precision by over 10% compared to baselines.
- Deployed the model through WeChat Mini Program to give real-time shop preference / discount recommendations for customers.

InstaPhoto, USC
A picture sharing website similar to Instagram supporting login, post, follow/unfollow and making comments.

- Built with React.js & Bootstrap and integrated it into Django template mechanism.
- Developed all views of the website and Django controllers for managing user status and history.

WORK EXPERIENCE

Tencent AI Lab, *Research Scientist Intern*, Shenzhen, China *July 2019 - Sept. 2019*

- Proposed a graph based deep learning model on large-scale social networks. The model improves the classification accuracy by 10%. Work was published on *arXiv:1906.11994*.
- Proposed a reinforcement learning based algorithm on graph molecular generation.

Meizu Technology Co., Ltd, *Software Engineer Intern*, Zhuhai, China *July 2018 - Sept. 2018*

- Proposed a collaborative filtering model from scratch to recommend news for users using Spark. By incorporating various types of side information e.g. users browsing time, click-through rate, the model has more than 10% performance improvement.

University of Southern California, *Teaching Assistant*

- Internet and Cloud Computing (EE 542) *Fall 2020*
- Analysis for Algorithms (CSCI 570) *Fall 2019*
- Machine Learning for Data Informatics (INF 552) *Fall 2018, Spring 2019*

SKILLS

Programming: Python; Java; C++; JavaScript; Matlab.
Machine Learning Frameworks: PyTorch; TensorFlow; Sklearn; Spark.
Web: Node.js; Django; Apache; MongoDB; MySQL; AWS.