# TIMOTHY(TIANXIANG) ZHAO

# Pennsylvania State University, University Park fykd2@mail.ustc.edu.cn

## **EDUCATION**

University of Science and Technology of China

Sep 2013 - June 2017

Class of the Gifted Young, School of the Gifted Young Bachelor in Computer Science

University of Science and Technology of China

Sep 2017 - June 2019

Software Engineering, School of the Software

Pennsylvania State University

June2019 - present

College of Information Science and Technology

Advisor: Suhang Wang, Xiang Zhang

#### RESEARCH BACKGROUNDS

Graph Neural Network, Transfer Learning, Natural Language Processing

# RESEARCH EXPERIENCE

**NEC Labs** May 2022 - Aug 2022

Research Intern in NLP

Princeton, US

- · Mentor: Wenchao Yu
- · Focusing on imitation learning with latent skill discovery.
- · Research interests: Reinforcement Learning, Imitation Learning, Positive-unlabeled learning

NEC Labs May 2021 - Aug 2021

Research Intern in NLP

Princeton, US

- · Mentor: Wenchao Yu
- · Focusing on interpreting RL agents with causality theory.
- · Research interests: Causal Discovery, Reinforcement Learning, Imitation Learning

Tencent AI Lab Jan 2019 - June 2019

Research Intern in NLP

Shenzhen, China

- · Mentor: Lemao Liu
- · Focusing on applying reinforcement learning to machine translation.
- · Research interests: Neural Machine Translation, Reinforcement Learning

SenseTime

July 2018 - Jan 2019

Research Intern in Computer Vision

Beijing, China

- · Mentor: Xu Jia, Jing Shao
- · Focusing on designing efficient networks to be run on mobile devices.
- · Research interests: Domain Adaptation, Knowledge Distillation, Network Architecture

# **Anhui Province Key Laboratory of Big Data Analysis and Application** May 2017 - June 2019

Graduate Student USTC

- · Supervisor: Guiquan Liu
- · Learning basics in convex optimization and machine learning.
- · Research interests: Transfer Learning, Domain Adaptation, Zero-shot Learning.

## PROJECT EXPERIENCE

## Semantic segmentation for remote sensing images

Sep 2017 - Nov 2017

- · Responsible for design and implement of the algorithm
- · Used FCN structure

# **PUBLICATIONS**

- · Tianxiang Zhao, Dongsheng Luo, Xiang Zhang, Suhang Wang. "TopoImb: Toward Topology-level Imbalance in Learning from Graphs." Accepted by LOG23.
- · **Tianxiang Zhao**, Dongsheng Luo, Xiang Zhang, Suhang Wang. "Towards Faithful and Consistent Explanations for Graph Neural Networks." Accepted by WSDM2023.
- · **Tianxiang Zhao**, Xiang ZHang, Suhang Wang. "Exploring Edge Disentanglement for Node Classification." Accepted by WWW2022.
- · Tianxiang Zhao, Enyan Dai, Kai Shu, Suhang Wang. "Towards Fair Classifiers Without Sensitive Attributes: ExploringBiases in Related Features." Accepted by WSDM2022.
- · **Tianxiang Zhao**, Xiang Zhang, Suhang Wang. "GraphSMOTE: Imbalanced Node Classification on Graphs with Graph Neural Networks." Accepted by WSDM2021.
- · **Tianxiang Zhao**, Xianfeng Tang, Xiang Zhang, Suhang Wang. "Semi-Supervised Graph-to-Graph Translation." Accepted by CIKM2020.
- Tianxiang Zhao, Lemao Liu, Huayang Li, Guoping Huang, Enhong Chen, Guiquan Liu, Shuming Shi. "Balancing Quality and Human Involvement: An Effective Approach to Interactive Neural Machine Translation." Accepted by AAAI2020.
- · Tianxiang Zhao, Guiquan Liu, Le Wu, Chao Ma, Enhong Chen. "Energy Based Model for Zero Shot Learning." regular paper.International conference on Data Mining(ICDM),2018.
- · Xiaoying Ren, Linli Xu, **Tianxiang Zhao**(second student author), Chen Zhu, Junliang Guo, Enhong Chen. "Tracking and Forecasting Dynamics in Crowdfunding: A Basis-Synthesis Approach." short paper, International conference on Data Mining(**ICDM**),2018.