# **Zhaoxuan Tan**

Address: Pengkang Building 206, 28 Xianning W Rd, Xi'an, China

Email: tanzhaoxuan@stu.xjtu.edu.cn Homepage: tamsiuhin.github.io Last updated: June 9, 2022

#### Research Interests

I am broadly interested in graph neural networks, knowledge graph, social network analysis, natural language processing, and graph mining in general. Previous research includes Twitter bot detection, knowledge graph completion, and graph representation learning. Now I'm working on large-scale knowledge graph reasoning.

#### **Education**

**Xi'an Jiaotong University**, Xi'an, Shaanxi, China (member of the C9 league in China) 2019.8-present B.S. in Computer Science and Technology

GPA: 90.08/100 (Transcript), rank 11th among 164 students

Advisor: Minnan Luo

## Publications (\* indicates equal contribution)

[1] Contrastive Learning with Graph Context Modeling for Sparse Knowledge Graph Completion.

**Zhaoxuan Tan**, Zilong Chen, Shangbin Feng, Qingyue Zhang, Qinghua Zheng, Jundong Li, Minnan Luo. *In submission*.

[2] TwiBot-22: Towards Graph-Based Twitter Bot Detection.

Shangbin Feng\*, **Zhaoxuan Tan\***, Herun Wan\*, Ningnan Wang\*, Zilong Chen\*, Binchi Zhang\*, Qinghua Zheng, Wenqian Zhang, Zhenyu Lei, Shujie Yang, Xinshun Feng, Qingyue Zhang, Hongrui Wang, Yuhan Liu, Yuyang Bai, Heng Wang, Zijian Cai, Yanbo Wang, Lijing Zheng, Zihan Ma, Jundong Li, Minnan Luo. *In submission*.

[3] Heterogeneity-aware Twitter Bot Detection with Relational Graph Transformers.

Shangbin Feng, Zhaoxuan Tan, Rui Li, Minnan Luo.

2022 AAAI Conference on Artificial Intelligence (AAAI), 2022. [15% acceptance rate]

[4] Legislator Representation Learning with Social Context and Expert Knowledge.

Shangbin Feng, **Zhaoxuan Tan**, Zilong Chen, Peisheng Yu, Qinghua Zheng, Xiaojun Chang, Minnan Luo. arXiv preprint arXiv:2110.12906 (2021).

[5] AHEAD: A Triple Attention Based Heterogeneous Graph Anomaly Detection Approach.

Shujie Yang, Binchi Zhang, Shangbin Feng, **Zhaoxuan Tan**, Qinghua Zheng, Ziqi Liu, Minnan Luo. *In submission*.

#### **Honors and Awards**

AAAI Student Scholarship, Association for the Advancement of Artificial Intelligence	2022
National Second Prize, Contemporary Undergraduate Mathematical Contest in Modeling	2021
Scholarship for Outstanding Students, Second Prize (rank $11/164$ ), Xi'an Jiaotong University	2021
Dean's List, Xi'an Jiaotong University	2021
Top Project Runner Up, NUS SoC Summer Workshop	2021
Honorable Mentioned Prize (top 15%), Mathematical Contest in Modeling (MCM)	2021
Scholarship for Outstanding Students, Second Prize (rank $39/1200$ ), Xi'an Jiaotong University	2020
First Prize in Shaanxi Province, Contemporary Undergraduate Mathematical Contest in Modeling	2020
Dean's List, Xi'an Jiaotong University	2020

## **Experience**

Research Intern, Knowledge Engineering Group (KEG), Tsinghua University

2022.4-present

Large-scale knowledge graph completion and reasoning with language model.

Advisor: Yuxiao Dong @ Tsinghua University, China

Research Assistant, LUD (Luo lab Undergraduate Division), Xi'an Jiaotong University

2021.8-present

Member of the LUD lab, focusing on graph-based Twitter bot detection and knowledge graph embedding

learning. One second-author conference paper of Twitter bot detection got accepted at AAAI 2022.

Advisor: Minnan Luo @ Xi'an Jiaotong University, China

Summer Workshop, National University of Singapore (virtual)

2021.5-2021.7

Attend lectures in Al analytics and IoT, build a Twitter bot detection demo.

Advisor: Lek Hsiang Hui @ National University of Singapore, Singapore

Information-technology Talent Program, Xi'an Jiaotong University

2020.11-2021.10

Bulid a UAV formation control system, learn basic reinforcement learning algorithm

Advisor: Liangjun Ke @ Xi'an Jiaotong University, China

#### **Skills**

### **Programming Languages:**

-Proficient: Python, MATLAB, C/C++
-Capable: Bash, HTML/CSS, Javascript

Tools and Frameworks: Pytorch, LATEX, Visual Studio, MobaXTerm, Git, ssh, Vim

Natural Languages: Mandarin (native), English (fluent), Cantonese (native)