

TIANXIANG SUN

2005 Songhu Rd., Shanghai, China 200438

(+86) 198 2125 0368 ◊ txsun1997.github.io ◊ txsun19@fudan.edu.cn

EDUCATION

Fudan University

Ph.D. Student, Computer Science

School of Computer Science

Advisor: Prof. Xipeng Qiu & Prof. Xuanjing Huang

September 2019 - Present

Shanghai, China

Xidian University

Bachelor of Engineering, Software Engineering

School of Computer Science and Technology (Excellent Track)

GPA: 3.8/4.0 (top 1%), Outstanding Graduate

September 2015 - June 2019

Xi'an, China

Shengli NO.1 Senior High School

First Prize of China High School Biology Olympiad

September 2012 - June 2015

Dongying, Shandong, China

INTERNSHIP

Amazon Web Services

Applied Scientist Intern

Amazon Shanghai AI Lab

Supervisor: Prof. Zheng Zhang

October 2019 - August 2020

Shanghai, China

RESEARCH INTERESTS

My research interests lie in natural language processing and machine learning, specifically in:

- pre-trained language models and their optimization/inference-efficient algorithms
- knowledge-enhanced pre-training
- neural-based multitask learning for NLP

ACADEMIC SERVICES

Conference Reviewer / PC Member

2020: COLING

2021: ACL, EMNLP, AACL, IJCAI

2022: NeurIPS, ICML, ACL, EMNLP, COLING, AACL, IJCAI

HONORS & AWARDS

Most Influential Paper Award of Sci. China Tech Sci.

March 2022

National Scholarship for Graduate Student

October 2020

Outstanding Graduate of Xidian University

June 2019

Honorable Mention in MCM/ICM

February 2018

First Prize of National MCM (Shaanxi division)	October 2017
Principal Scholarship in School of Computer Science and Technology (four times)	2017 - 2019
First Prize Scholarship of Xidian University (four times)	2015 - 2018
First Prize in China High School Biology Olympiad	June 2014

PUBLICATIONS

* denotes equal contribution.

1. **Black-Box Tuning for Language-Model-as-a-Service**
Tianxiang Sun, Yunfan Shao, Hong Qian, Xuanjing Huang, Xipeng Qiu
ICML 2022 (Spotlight)
2. **Paradigm Shift in Natural Language Processing**
Tianxiang Sun, Xiangyang Liu, Xipeng Qiu, Xuanjing Huang
Machine Intelligence Research (Invited Paper)
3. **Towards Efficient NLP: A Standard Evaluation and A Strong Baseline**
Xiangyang Liu*, Tianxiang Sun*, Junliang He, Lingling Wu, Xinyu Zhang, Hao Jiang, Zhao Cao, Xuanjing Huang, Xipeng Qiu
NAACL 2022 (Oral)
4. **A Simple Hash-Based Early Exiting Approach For Language Understanding and Generation**
Tianxiang Sun, Xiangyang Liu, Wei Zhu, Zhichao Geng, Lingling Wu, Yilong He, Yuan Ni, Guotong Xie, Xuanjing Huang, Xipeng Qiu
Findings of ACL 2022
5. **Accelerating BERT Inference for Sequence Labeling via Early-Exit**
Xiaonan Li, Yunfan Shao, Tianxiang Sun, Hang Yan, Xipeng Qiu, Xuanjing Huang
ACL 2021
6. **Does Syntax Matter? A Strong Baseline for Aspect-Based Sentiment Analysis with RoBERTa**
Junqi Dai, Hang Yan, Tianxiang Sun, Pengfei Liu, Xipeng Qiu
NAACL 2021
7. **CoLAKE: Contextualized Language and Knowledge Embedding**
Tianxiang Sun, Yunfan Shao, Xipeng Qiu, Qipeng Guo, Yaru Hu, Xuanjing Huang, Zheng Zhang
COLING 2020
8. **Pre-trained Models for Natural Language Processing: A Survey**
Xipeng Qiu, Tianxiang Sun, Yige Xu, Yunfan Shao, Ning Dai, Xuanjing Huang
SCIENCE CHINA Technological Sciences (Invited Paper, most influential paper award)
9. **Learning Sparse Sharing Architectures for Multiple Tasks**
Tianxiang Sun*, Yunfan Shao*, Xiaonan Li, Pengfei Liu, Xipeng Qiu, Xuanjing Huang
AAAI 2020 (Oral)

PAPERS UNDER REVIEW

* denotes equal contribution.

1. **BBTv2: Towards a Gradient-Free Future with Large Language Models**
Tianxiang Sun, Zhengfu He, Hong Qian, Xuanjing Huang, Xipeng Qiu
Submitted to EMNLP 2022 (arxiv: 2205.11200)

2. **Multi-Task Pre-Training of Modular Prompt for Few-Shot Learning**
Tianxiang Sun, Zhengfu He, Qin Zhu, Xuanjing Huang, Xipeng Qiu
Submitted to EMNLP 2022
3. **BERTScore is Unfair: On Social Bias in Language Model-Based Metrics for Text Generation**
Tianxiang Sun, Junliang He, Xipeng Qiu, Xuanjing Huang
Submitted to EMNLP 2022
4. **MULEE: Early Exiting BERT for Efficient Multi-Label Text Classification**
Lingling Wu*, **Tianxiang Sun***, Xiangyang Liu, Xipeng Qiu, Xuanjing Huang
Submitted to EMNLP 2022
5. **Late Prompt Tuning: A Late Prompt Could Be Better Than Many Prompts**
Xiangyang Liu*, **Tianxiang Sun***, Xipeng Qiu, Xuanjing Huang
Submitted to EMNLP 2022
6. **Early Exiting with Ensemble Internal Classifiers**
Tianxiang Sun*, Yunhua Zhou*, Xiangyang Liu, Xinyu Zhang, Hao Jiang, Zhao Cao, Xuanjing Huang, Xipeng Qiu
Submitted to EMNLP 2022 (arxiv: 2105.13792)
7. **Learning to Teach with Student Feedback**
Yitao Liu*, **Tianxiang Sun***, Xipeng Qiu, Xuanjing Huang
Submitted to SCIENCE CHINA Information Science (arXiv: 2109.04641)