TIANXIANG SUN

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EDUCATION

Fudan University

September 2019 - Present

Ph.D. Student, Computer Science

Shanghai, China

School of Computer Science

Advisor: Prof. Xipeng Qiu & Prof. Xuanjing Huang

Xidian University

September 2015 - June 2019

Bachelor of Engineering, Software Engineering

Xi'an, China

School of Computer Science and Technology (Excellent Track)

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

Shengli NO.1 Senior High School

September 2012 - June 2015

First Prize of China High School Biology Olympiad

Dongving, Shandong, China

INTERNSHIP

Shanghai AI Lab

Research Intern

March 2023 - Present

Shanghai, China

Alibaba DAMO Academy

Research Intern

December 2022 - March 2023 Hangzhou, China

October 2019 - August 2020

Applied Scientist Intern

Amazon Shanghai AI Lab

Amazon Web Services

Supervisor: Prof. Zheng Zhang

Shanghai, China

RESEARCH INTERESTS

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

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

ACADEMIC SERVICES

Student Seminar Co-Chair

CCL 2023

Conference Reviewer / PC Member

ACL (2021, 2022, 2023)

EMNLP (2021, 2022)

COLING (2020, 2022)

ICML (2022)

NeurIPS (2022, 2023)

AAAI (2021)

IJCAI (2021)

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

MOSS: Building Conversational Language Models from Synthetic Data
 Tianxiang Sun, Xiaotian Zhang, Zhengfu He, Peng Li, Hang Yan, Xingjian Zhao, Ke Chen, Xiangyang Liu, Xipeng Qiu
 To be appeared 2023

- 2. BBTv2: Towards a Gradient-Free Future with Large Language Models Tianxiang Sun, Zhengfu He, Hong Qian, Yunhua Zhou, Xuanjing Huang, Xipeng Qiu *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 $EMNLP\ 2022$

4. Black-Box Tuning for Language-Model-as-a-Service

Tianxiang Sun, Yunfan Shao, Hong Qian, Xuanjing Huang, Xipeng Qiu *ICML* 2022 (Spotlight)

5. Paradigm Shift in Natural Language Processing

Tianxiang Sun, Xiangyang Liu, Xipeng Qiu, Xuanjing Huang *Machine Intelligence Research* (Invited Paper)

6. 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

7. CoLAKE: Contextualized Language and Knowledge Embedding

 $\bf Tianxiang \, Sun, \, Yunfan \, Shao, \, Xipeng Qiu, Qipeng Guo, Yaru Hu, Xuanjing Huang, Zheng Zhang <math display="inline">COLING \, \, 2020$

^{*} denotes equal contribution.

- 8. Learning Sparse Sharing Architectures for Multiple Tasks
 Tianxiang Sun*, Yunfan Shao*, Xiaonan Li, Pengfei Liu, Xipeng Qiu, Xuanjing Huang
 AAAI 2020 (Oral)
- 9. 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)
- Late Prompt Tuning: A Late Prompt Could Be Better Than Many Prompts Xiangyang Liu, Tianxiang Sun, Xuanjing Huang, Xipeng Qiu Findings of EMNLP 2022
- 11. 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)
- 12. Accelerating BERT Inference for Sequence Labeling via Early-Exit Xiaonan Li, Yunfan Shao, Tianxiang Sun, Hang Yan, Xipeng Qiu, Xuanjing Huang ACL 2021
- 13. Does Syntax Matter? A Strong Baseline for Aspect-Based Sentiment Analysis with RoBERTa

Junqi Dai, Hang Yan, **Tianxiang Sun**, Pengfei Liu, Xipeng Qiu $NAACL\ 2021$