

# TIANXIANG SUN

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## EDUCATION

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### **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

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### **Amazon Web Services**

Applied Scientist Intern

Amazon Shanghai AI Lab

Supervisor: Prof. Zheng Zhang

*October 2019 - August 2020*

Shanghai, China

### **Inspur Group**

Software Engineer

*June 2018 - August 2018*

Jinan, Shandong, China

## RESEARCH INTERESTS

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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

## PUBLICATIONS

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*\* denotes equal contribution.*

### **Black-Box Tuning for Language-Model-as-a-Service**

**Tianxiang Sun**, Yunfan Shao, Hong Qian, Xuanjing Huang, Xipeng Qiu

*ICML 2022*

### **Paradigm Shift in Natural Language Processing**

**Tianxiang Sun**, Xiangyang Liu, Xipeng Qiu, Xuanjing Huang

*Machine Intelligence Research* (Invited Paper)

### **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*

## **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*

## **Early Exiting with Ensemble Internal Classifiers**

**Tianxiang Sun\***, Yunhua Zhou\*, Xiangyang Liu, Xinyu Zhang, Hao Jiang, Zhao Cao, Xuanjing Huang, Xipeng Qiu

*arXiv 2105.13792*

## **Learning to Teach with Student Feedback**

Yitao Liu\*, **Tianxiang Sun\***, Xipeng Qiu, Xuanjing Huang

*arXiv 2109.04641*

## **Accelerating BERT Inference for Sequence Labeling via Early-Exit**

Xiaonan Li, Yunfan Shao, **Tianxiang Sun**, Hang Yan, Xipeng Qiu, Xuanjing Huang

*ACL 2021*

## **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*

## **CoLAKE: Contextualized Language and Knowledge Embedding**

**Tianxiang Sun**, Yunfan Shao, Xipeng Qiu, Qipeng Guo, Yaru Hu, Xuanjing Huang, Zheng Zhang

*COLING 2020*

## **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)

## **Learning Sparse Sharing Architectures for Multiple Tasks**

**Tianxiang Sun\***, Yunfan Shao\*, Xiaonan Li, Pengfei Liu, Xipeng Qiu, Xuanjing Huang

*AAAI 2020* (Oral)

## **ACADEMIC SERVICES**

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### **Conference Reviewer / PC Member**

COLING-2020

ACL-2021, EMNLP-2021, AAAI-2021, IJCAI-2021

NeurIPS-2022, ICML-2022, ACL-2022, COLING-2022, AAAI-2022, IJCAI-2022

## **HONORS & AWARDS**

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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*