

# Tengxiao Liu

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## Education

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### Fudan University

*Master of Science, Computer Science*

Supervisor: Prof. Xipeng Qiu

Sep 2021 - expected Jun 2024

*Shanghai, China*

### Xi'an Jiaotong University

*Bachelor of Science, Honors Program (Computer Science)*

GPA: 91.92/100, Ranking: 2/32

Thesis: *QuARE: Question Answering based Joint Entity and Relation Extraction*

Sep 2017 - Jun 2021

*Xi'an, China*

### University of California, Berkeley

*Berkeley International Study Program - Letters & Science (Computer Science)*

GPA: 4.0/4.0, Joined Undergraduate Research Apprentice Program (URAP)

Jan 2020 - May 2020

*Berkeley, US*

### Xi'an Jiaotong University

*Honor's Youth Program*

Sep 2015 - Jun 2017

*Xi'an, China*

## Experience

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### Amazon AWS AI

*Advisor: Dr. Qipeng Guo, Prof. Yue Zhang, Prof. Zheng Zhang*

Mar 2021 - Present

*Shanghai, China*

- Worked on QA systems and Natural Language Reasoning. Proposed RLET, a reinforcement learning based entailment tree generation framework. Currently I am focusing on reasoning abilities of Large Language Models on math and logical reasoning.

### University of California, San Francisco

*Advisor: Jae Ho Sohn, MD, MS*

Feb 2020 - Mar 2021

*San Francisco, US*

- Joined Big Data in Radiology lab, proposed Radiology BERT, which can identify speech recognition (SR) errors and suggest corrections in radiology reports.

### University of Alberta

*Advisor: Prof. Linglong Kong*

Summer 2019

*Edmonton, Canada*

- International Undergraduate Summer Enrichment Program: Excellence

### Huawei

*Smart Wearable and Sports Health PDU*

Summer 2020

*Xi'an, China*

- Huawei Watch GT2-Pro: Big data analysis platform and testing

## Publications

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- **Tengxiao Liu**, Qipeng Guo, Yuqing Yang, Xiangkun Hu, Yue Zhang, Xipeng Qiu, Zheng Zhang. Navigating Beyond the Dead End: A Math Problem Solving Framework by Switching among Diverse Reasoning Thoughts. *EMNLP 2023*.

- **Tengxiao Liu**, Qipeng Guo, Xiangkun Hu, Yue Zhang, Xipeng Qiu, Zheng Zhang.  
RLET: A Reinforcement Learning Based Approach for Explainable QA with Entailment Trees.  
*EMNLP 2022*.
- Gunvant R. Chaudhari, **Tengxiao Liu**, Timothy L. Chen, Gabby B. Joseph, Maya Vella, Yoo Jin Lee, Thienkhai H. Vu, Youngho Seo, Andreas M. Rauschecker, Charles E. McCulloch, Jae Ho Sohn.  
Application of a Domain-specific BERT for Detection of Speech Recognition Errors in Radiology Reports.  
*Radiology: Artificial Intelligence, 2022*.
- Kai Lv, Yuqing Yang, **Tengxiao Liu**, Qinghui Gao, Qipeng Guo, Xipeng Qiu.  
Full Parameter Fine-tuning for Large Language Models with Limited Resources.  
*Preprint 2023*.

## Awards

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- Pengkang Scholarship, 2018: Awarded to top 5% overall ranking students in each major.
- Second Prize Scholarship, 2017: Awarded to top 10% overall ranking students in each major.
- Outstanding Students, 2017/2018/2019.
- National Grand Prize (No.1 in Shaanxi Province): 2018 National English Competition for College Students
- National Second Prize, Provincial First Prize: 24th China Daily "21st Century Coca-Cola Cup" National English-Speaking Competition

## Skills

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- **Professional Services:** Reviewer for ACL 2022
- **Teaching Assistant:** Database Systems Designs, Fudan Undergrad Course, Fall 2022
- **Language Proficiency:** TOEFL - 111