Tengxiao Liu

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Education

Fudan University — Sep 2021 - expected Jun 2024
Master of Science, Computer Science — *Shanghai, China*
Supervisor: Prof. Xipeng Qiu

Xi'an Jiaotong University — Sep 2017 - Jun 2021
Bachelor of Science, Honors Program (*Computer Science*) — *Xi'an, China*
GPA: 91.92/100, Ranking: 2/32
Thesis: *QuARE: Question Answering based Joint Entity and Relation Extraction*

University of California, Berkeley — Jan 2020 - May 2020
Berkeley International Study Program - Letters & Science (*Computer Science*) — *Berkeley, US*
GPA: 4.0/4.0, Joined Undergraduate Research Apprentice Program (URAP)

Xi'an Jiaotong University — Sep 2015 - Jun 2017
Honor's Youth Program — *Xi'an, China*

Experience

Amazon AWS AI — Mar 2021 - Present
Advisor: Dr. Qipeng Guo, Prof. Yue Zhang, Prof. Zheng Zhang — *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 — Feb 2020 - Mar 2021
Advisor: Jae Ho Sohn, MD, MS — *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 — Summer 2019
Advisor: Prof. Linglong Kong — *Edmonton, Canada*

- International Undergraduate Summer Enrichment Program: Excellence

Huawei — Summer 2020
Smart Wearable and Sports Health PDU — *Xi'an, China*

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

Publications

- **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: Artificiall 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.

- **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.
Under review.

Awards

- 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

- **Professional Services:** Reviewer for AACL 2022

- **Teaching Assistant:** Database Systems Designs, Fudan Undergrad Course, Fall 2022

- **Language Proficiency:** TOEFL - 111