Tengxiao Liu

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Education

University of California, Santa Barbara Sep 2024 - Present
Ph.D., Computer Science *Santa Barbara, US*
Advisor: Prof. William Wang

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

Xi'an Jiaotong University Sep 2017 - Jun 2021
Bachelor of Engineering, Honors Program (Computer Science), Special Gifted Young Class *Xi'an, China*
GPA: 91.92/100, Ranking: 2/32

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

Experience

Amazon AWS AI Mar 2021 - Aug 2024
Advisor: Dr. Qipeng Guo, Prof. Yue Zhang, Prof. Zheng Zhang *Shanghai, China*

- Research intern. Worked on building systems that can perform complex reasoning tasks, covering commonsense, math, logical and symbolic reasoning.

University of California, San Francisco Feb 2020 - Mar 2021
Advisor: Prof. Jae Ho Sohn *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*

- Department of Mathematical and Statistical Sciences
- International Undergraduate Summer Enrichment Program: Excellence

Publications

- **Tengxiao Liu**, Qipeng Guo, Xiangkun Hu, Jiayang Cheng, Yue Zhang, Xipeng Qiu, Zheng Zhang.
  Can Language Models Learn to Skip Steps?
  NeurIPS 2024.

- Jiayang Cheng, Qianqian Zhuang, Chunkit Chan, Lin Qiu, Tianhang Zhang, **Tengxiao Liu**, Yangqiu Song, Yue Zhang, Pengfei Liu, Zheng Zhang
  ECON: On the Detection and Resolution of Evidence Conflicts.
  EMNLP 2024.

- Qin Zhu, Qinyuan Cheng, Runyu Peng, Xiaonan Li, Ru Peng, **Tengxiao Liu**, Xipeng Qiu, Xuanjing Huang.

Inference-Time Decontamination: Reusing Leaked Benchmarks for Large Language Model Evaluation.
EMNLP 2024 findings.

- Kai Lv, Yuqing Yang, **Tengxiao Liu**, Qinghui Gao, Qipeng Guo, Xipeng Qiu.
Full Parameter Fine-tuning for Large Language Models with Limited Resources.
ACL 2024 oral.

- **Tengxiao Liu**, Qipeng Guo, Yuqing Yang, Xiangkun Hu, Yue Zhang, Xipeng Qiu, Zheng Zhang.
Plan, Verify and Switch: Integrated Reasoning with Diverse X-of-Thoughts.
EMNLP 2023.
NeurIPS 2023 MATH-AI workshop.

- Kai Lv, Shuo Zhang, Tianle Gu, Shuhao Xing, Jiawei Hong, Keyu Chen, Xiaoran Liu, Yuqing Yang, Honglin Guo, **Tengxiao Liu**, Yu Sun, Qipeng Guo, Hang Yan, Xipeng Qiu.
CoLLiE: Collaborative Training of Large Language Models in an Efficient Way.
EMNLP 2023 demo.

- **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.

Awards

- Shanghai Outstanding Graduate, Shanghai, 2024
- Second Prize Scholarship, Fudan University, 2023
- Academic Excellence Scholarship, Fudan University, 2022
- Outstanding Graduate, XJTU, 2021
- Outstanding Students (Dean's List), XJTU, 2018/2019/2020.
- Second Prize Scholarship, XJTU, 2020.
- Pengkang Scholarship, XJTU, 2018: Awarded to top 5% overall ranking students in each major.
- National Grand Prize, 2018: National English Competition for College Students
- National Prize, Provincial First Prize, 2019: "21st Century" National English-Speaking Competition

Skills

- **Professional Services:** Reviewer for ICML'25, ICLR'25, ARR'25, NeurIPS'24, ARR'24
- **Teaching Assistant:** Database Systems Designs, Fudan Undergrad Course, Fall 2022
- **Language Proficiency:** TOEFL - 113 (S:29)