Xiangyu Zeng

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Google Profile
Chinese Citizen

EDUCATION

• M.Sc. in Computer Science and Technology
University of Electronic Science and Technology of China (UESTC)

GPA: 3.77/4.00 09.2017-07.2022 GPA: 3.80/5.00

09.2022-07.2025

• B.Eng. in Software Engineering

Chengdu University of Technology (CDUT)

RESEARCH INTERESTS

My research is in machine learning and artificial intelligence, specifically in areas such as large language models (LLMs) and diffusion models. And I am dedicated to merging insights from cognitive science to advance toward artificial general intelligence (AGI).

Currently, my research focuses on enhancing the **representation** and **reasoning** capabilities of large-scale models such as **Transformers** by integrating concepts from **memory** and **reflective** mechanisms.

PUBLICATIONS

Xiangyu Zeng, Jie Lin*, Piao Hu, Ruizheng Huang, Zhicheng Zhang, "A Framework for Inference Inspired by Human Memory Mechanisms", *International Conference on Learning Representations (ICLR)*, 2024.

Xiangyu Zeng, Jie Lin*, Piao Hu, Zhihao Li, Tianxi Huang, "SDMTR: A Brain-inspired Transformer for Relation Inference", Artificial Intelligence and Statistics (AISTATS), 2024.

Jie Lin*, **Xiangyu Zeng**, Yulong Pan, Shangqing Ren, Yige Bao, "Intelligent Inspection Guidance of Urethral Endoscopy Based on SLAM with Blood Vessel Attentional Features", *Cognitive Computation*, 2024.

Shuo Quan, Mengyu Sun*, **Xiangyu Zeng**, Xuliang Wang, Zeya Zhu, "Time Series Classification Based on Multi-Dimensional Feature Fusion", *IEEE Access*, 2023.

PATENTS

Jie Lin, **Xiangyu Zeng**, Piao Hu, Yulong Liang, Yi Bai, "A Comprehensive Evaluation Method for Enterprise Database Systems", Chinese Patent CN202310448064.7, 2023.

Jie Lin, Xinyu Xiao, Yulong Liang, Yi Bai, **Xiangyu Zeng**, Yong Wang, "A Method for Predicting Positive Margins of Prostate Cancer Based on 3D Feature Computation", Chinese Patent CN202310029875.3, 2023.

INTERNSHIP EXPERIENCE

• China Telecom Research Institute	06.2022-12.2022
Beijing, China	

HONORS AND AWARDS

National encouragement scholarship	11.2019
• Excellent student cadre of the CDUT	10.2020
• Grade A certificate of comprehensive performance conferred by Sichuan Province	07.2021
• National encouragement scholarship	11.2021
• Outstanding graduate of CDUT	06.2022
• Outstanding graduate student of the UESTC	11.2023
• Outstanding student of the Laboratory of Intelligent Collaborative Computing at the UESTC	12.2023
• Academic young achievers of the UESTC	03.2024
• Excellent student cadre of the UESTC	04.2024
• Outstanding graduate student of the UESTC	05.2024

TEACHING ASSISTANT

Fundamental of Software Technology, G0815920.03 (UESTC)

Operating System Experiment, 0852116005 (UESTC)

ACADEMIC ACTIVITIES

• Poster Present at ICLR'2024

Vienna, 05.2024

• Poster Present at AISTATS'2024

 $Valencia,\ 05.2024$