

Xiangyu Zeng

Computer Science and Technology
School of Computer Science and Engineering
University of Electronic Science and Technology of China
No.2006, Xiyuan Ave, West Hi-Tech Zone,
Chengdu, Sichuan, China

+86-15881049695
zengxy@std.uestc.edu.cn
GitHub Profile
Google Profile
Chinese Citizen

EDUCATION

- M.Sc. in Computer Science and Technology** 09.2022-07.2025
University of Electronic Science and Technology of China (UESTC) GPA: 3.77/4.00
- B.Eng. in Software Engineering** 09.2017-07.2022
Chengdu University of Technology (CDUT) GPA: 3.60/5.00

RESEARCH INTERESTS

My research is in Deep Learning and Artificial Intelligence, specifically in areas such as large language models (**LLMs**), Artificial General Intelligence (**AGI**), like LLM-based Agent, and Generative Artificial Intelligence (**GAI**), including diffusion models. I am dedicated to merging insights from cognitive science to advance towards AGI.

And currently, my research focuses on enhancing the **representation** and **reasoning** capabilities of large-scale models such as Transformers and Vision 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

CONTESTS

- The Hua Cup National College Student Mathematics Competition *12.2019*
- National E-Commerce “Innovation, Creation, Entrepreneurship”
Challenge Competition for College Students *06.2021*
- China International College Students’ Innovation Competition *09.2021*
- The Hua Cup National College Student Mathematics Competition *12.2022*

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*