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

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EDUCATION

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

GPA: 3.77/4.00 (87.74/100)

• B.Eng. in Software Engineering

09.2017-07.2022

09.2022-07.2025

Chengdu University of Technology (CDUT)

GPA: 3.57/5.00 (85.48/100)

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

 $\hbox{Lin Jie, Liu Minmin, Fu Bo, \textbf{Xiangyu Zeng}, Hu Piao, Tang Yuan, "A 2D/3D registration method based on causal and the property of the pro$ inference", Chinese Patent CN2024111919634, 2024. Student First Inventor

Lin Jie, Fu Bo, Luo Guangchun, Hu Piao, Xiangyu Zeng, Wu Yizhe, "An optimization method for distributed query services", Chinese Patent CN2024111223647, 2024. Student Second Inventor

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

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

· Huawei Technologies Co., Ltd.

01.2025-06.2025

Shenzhen, China

Beijing, China

Honors and Awards

National encouragement scholarship	11.2019
• Excellent student cadre of the CDUT	10.2020
• Nominee for Top Ten Outstanding Students of the CDUT	06.2021
• Grade A certificate of comprehensive performance conferred by Sichuan Province	07.2021
National encouragement scholarship	11.2021
• Outstanding graduate of the CDUT	06.2022
• Outstanding postgraduate of the UESTC	11.2023
• First-class Scholarship for Postgraduate Studies	11.2023
• Outstanding student of the Laboratory of Intelligent Collaborative Computing at the U	UESTC 12.2023
• Academic young achievers of the UESTC	03.2024
• Excellent student cadre of the UESTC	04.2024
• Outstanding postgraduate of the UESTC	05.2024
• Outstanding party member of the UESTC	07.2024
Outstanding postgraduate of the UESTC	11.2024
• First-class Scholarship for Postgraduate Studies	11.2024
National Scholarship	12.2024
Outstanding Graduate of Sichuan Province	03.2025
• Outstanding Graduate of the UESTC	03.2025
Contests	
• Provincial Second Prize The Hua Cup National College Student Mathematics Competer	ition 12.2019
• National Third Prize National E-Commerce "Innovation, Creation, Entrepreneurship" Challenge Competition for College Students	06.2021
Provincial Silver Award China International College Students' Innovation Competition	09.2021
• Provincial Third Prize The Hua Cup National College Student Mathematics Competit	ion 12.2022
LEADERSHIP EXPERIENCE	
• Deputy squad leader	09.2018-06.2022
• President of the computer science and technology association	06.2021-06.2022
• Deputy director of the practice department, party affairs center	09.2022-09.2023
• Party branch secretary	06.2023-06.2024
Youth League Branch Secretary	09.2022-06.2025
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

• Reviewer for ICLR'2025

Hobbies

Photography, hiking and traveling