Shengyu **Ye**

USTC · COMPUTER SCIENCE AND TECHNOLOGY

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"Be the change that you want to see in the world."

Education

University of Science and Technology of China   *Hefei, Anhui*
B.E. IN COMPUTER SCIENCE AND TECHNOLOGY   *Sept. 2020 - Jun. 2024*

- Hua Xia Talent Program in Computer Science and Technology
- GPA: 3.97 (91.78) Rank: 7/269

University of Science and Technology of China   *Hefei, Anhui*

M.S. IN COMPUTER SCIENCE AND TECHNOLOGY   *Sept. 2024 - Jun.*
                                                                                      2027(expected)

- State Key Laboratory of Cognitive Intelligence
- Prof. Qi Liu

Experience

MSRA   *Beijing*
RLVR   *Mar. 2025 - May. 2025*

- Explored the impact of RLVR on enhancing the upper bound of model reasoning capabilities.

Zhongguancun Academy   *Beijing*
INFORMATION ENGINE STARTUP PROJECT   *Dec. 2024 - Feb. 2025*

- Information engine prototype, designing the core system architecture and data processing pipelines.

MSRA   *Beijing*
LUT-DLA   *Sept. 2023 - Jun. 2024*

- Responsible for the implementation of the LiteLUT algorithm and model fine-tuning.
- Completed during the MSRA Innovation Talent Program.

NSFC   *USTC*
NSFC BASIC RESEARCH PROGRAM FOR YOUNG STUDENTS   *2023*

- Cognitive LLM-based Approach for Automatic Generation of Programming Language Test Cases

Publication

[1] **Shengyu Ye**, Qi Liu, Hao Jiang, Zheng Zhang, Yu Heng, Zhenya Huang. "Themis: Automated Constraint-Aware Test Synthesis Framework for Code Reinforcement Learning". In: *Proceedings of the AAAI Conference on Artificial Intelligence*. Vol. 40. Accepted for publication. 2026.

[2] Zifan He, **Shengyu Ye**, Rui Ma, Yang Wang, Jason Cong. *LUT-LLM: Efficient Large Language Model Inference with Memory-based Computations on FPGAs*. 2025. arXiv: 2511.06174 [cs.AR]. URL: https://arxiv.org/abs/2511.06174.

[3] Guoyu Li, **Shengyu Ye**, Chunyun Chen, Yang Wang, Fan Yang, Ting Cao, Cheng Liu, Mohamed M Sabry Aly, Mao Yang. "LUT-DLA: Lookup Table as Efficient Extreme Low-Bit Deep Learning Accelerator". In: *2025 IEEE International Symposium on High Performance Computer Architecture (HPCA)*. IEEE. 2025, pp. 671–684.

[4] Xumeng Wen, Zihan Liu, Shun Zheng, **Shengyu Ye**, Zhirong Wu, Yang Wang, Zhijian Xu, Xiao Liang, Junjie Li, Ziming Miao, Jiang Bian, Mao Yang. *Reinforcement Learning with Verifiable Rewards Implicitly Incentivizes Correct Reasoning in Base LLMs*. 2025. arXiv: 2506.14245 [cs.AI]. URL: https://arxiv.org/abs/2506.14245.

[5] Yifei Liu, Jicheng Wen, Yang Wang, **Shengyu Ye**, Li Lyna Zhang, Ting Cao, Cheng Li, Mao Yang. "VPTQ: Extreme Low-bit Vector Post-Training Quantization for Large Language Models". In: *Proceedings of the 2024 Conference on Empirical Methods in Natural Language Processing*. Ed. by Yaser Al-Onaizan, Mohit Bansal, and Yun-

Nung Chen. Miami, Florida, USA: Association for Computational Linguistics, Nov. 2024, pp. 8181–8196. DOI: 10.18653/v1/2024.emnlp-main.467. URL: https://aclanthology.org/2024.emnlp-main.467/.

Honors & Awards

2021	**Gold Award**, Outstanding Student Scholarship	*USTC*
2021	**Grade A**, Hua Xia Talent Program in Computer Science and Technology Scholarship	*USTC*
2022	**2nd Prize**, China Undergraduate Mathematical Contest in Modeling(Anhui Region)	*Hefei, Anhui*

Skills

DevOps	Git, Vue3, Docker
Platform	Macos, Ubuntu, Windows
Languages	Mandarin Chinese, English(CET4: 614 CET6: 581)
Programming	C/C++, Python, Rust, Verilog, MySql, Typescript, Markdown, LaTeX, Typst