

Yong Zhong

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About Me

I am a rising senior at SUSTech majoring in Computer Science, with research interests in Machine Learning (ML), representation learning and parameter generation. It's an honor for me to receive supervision from [dr. Kai Wang](#) and [prof. Yang You](#) during my stay at Singapore. Prior to that, I received supervision from [prof. Feng Zheng](#) at SUSTech where I participated in embodied AI research.

Education

Southern University of Science and Technology, Undergraduate (Current Enrollment) Sept 2023 – Present

- GPA: 3.77/4.0 (sustech.edu.cn)
- **Coursework:** Computer Organization(90), Operating System(95), Advanced Computer Programming/C++(93), Algorithm Design and Analysis(98)

Experience

Apprentice at STAR Lab April 2025 – Present

- With the supervision of prof. Feng Zheng, I participated in building an automated data collection pipeline [RADAR](#).

Research Internship at THU SIGS Sept 2025 – Jan 2026

- With the supervision of prof. Zhi Wang, I participated in developing a benchmark [GeoMind](#) for spatial reasoning.

Summer School at UC Berkeley Jun 2025 – Aug 2025

- I took CS161 Computer Security and CS188 Introduction to Artificial Intelligence.

Visiting Student at NUS Feb 2026 – Present

- With the supervision of dr. Kai Wang and prof. Yang You, I conduct research in the intersection of diffusion language model (DLM), large language model (LLM) and parameter generation.

Publications

(IROS 2026) RADAR: Closed-Loop Robotic Data Generation via Semantic Planning and Autonomous Causal Environment Reset [co-first author](#)

- We present Robust Autonomous Data Acquisition for Robotics (**RADAR**), a fully automated, closed-loop pipeline for real-world robot manipulation data collection. I participated in deploying an in-context imitation learning framework (instant policy) into the pipeline, setting dozens of simulation scenes and conducting almost all the experiments in RLbench simulation.
- **Tools Used:** RLbench, python, pytorch, SAM, Xmem++

(Neurips 2026 under review) GeoMIND: A Benchmark for Spatial Understanding in Robotic Manipulation [contributor](#)

- We introduce GeoMind, a benchmark for embodied spatial understanding. I participated in deploying, fine-tuning and benchmarking models including π_0 , openVLA, RDT2, UniVLA etc.
- **Tools Used:** Issac lab, python, pytorch, jax, websocket

Projects

Hypernetwork for multi-layer model steering first author

- Current steering methods fail to steer LLMs in a multi-layer intervention setting. We leverage hypernetwork to address this issue, enhancing the steering performance while preserving instruction following and fluency.
- **Tools Used:** pytorch lightning, Axbench, hypernetwork

MoRA: Enhancing math reasoning of diffusion language models using parameter generation

core contributor

- We introduce a mixer matrix as MoE in between LoRA matrices to enhance math reasoning for LLaDA-8B model. Our approach employed a hypernetwork for mixer matrix generation, conditioning on diffusion timesteps.
- **Tools Used:** pytorch, hypernetwork, slk

Qualifications

IELTS Exam Total: 8.0

Jul 2026

- Listening: 8.0 Reading: 9.0 Writing: 7.0 Speaking: 7.0

CET4: 644

CET6: 608

Awards

Contemporary Undergraduate Mathematical Contest in Modeling (CUMCM)

Oct 2025

- National 2nd Award

Contemporary Undergraduate Mathematical Contest in Modeling (CUMCM)

Oct 2024

- Provincial 2nd Award

2025 Outstanding Student Award

Nov 2025

2024 Outstanding Student Award

Nov 2024

Technologies

Programming Languages: Python, C/C++ , Java, Rust, SQL, LaTeX

Deep Learning & Distributed Engineering: PyTorch, PyTorch Lightning, DeepSpeed, Accelerate, Hugging Face (Transformers, PEFT, Datasets, Tokenizers), timm, einops, tyro, Weights & Biases (wandb)

Hardware Description & System Infrastructures: FPGA, Verilog, Vivado, RISC-V Assembly, PostgreSQL