Yixing Chen

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EDUCATION

Shanghai Jiao Tong University (SJTU)   Shanghai China
Bachelor of Computer Science   *Sept. 2022 - June. 2026(expected)*

- Member of ACM Honor Class, an elite CS program for top 5% talented students
- GPA: 3.9
- Selected Core Courses: Computer Vision (100), Machine Learning (96), Linear Algebra (H) (95), Design and Analysis of Algorithms (95), Programming Practice (99), Information Theory (98), etc.

RESEARCH EXPERIENCE

Machine Vision and Intelligence Group, SJTU   Shanghai, China
Research Assistant, advised by Prof. Yonglu Li and Prof. Cewu Lu   *June. 2024 - Present*

Research Topic: Dexterous hand manipulation, Imitation learning, and Reinforcement learning.

- I propose a low-cost replicable benchmark for robot learning with single task continuous metric and algorithm ability evaluation.
- I'm currently working on real deployment of the benchmark and testing its reproducibility.

PROJECTS

KETA: Kinematic-Phrases-Enhanced Text-to-Motion Generation via Fine-grained Alignment

- Submitted to International Joint Conference on Neural Networks(IJCNN) 2025 as co-first author.
- Proposed a method on motion generation through aligning kinematic phrases and decomposed text to improve the temporal and spatial order of generated motion in a plug and play fashion.

Compiler for Mx Language | *Java*

A ANTLR-4 based compiler that translates Mx* language (which is a C++ and Java like language) into RV32I Assembly. Designed based on LLVM IR and many optimizations are added for better performance.

RISC-V Tomasulo CPU | *Verilog*

A Tomasulo structure RISC-V CPU with 1-cycle ICache. Successfully generated bitstream with Vivado and programmed onto FPGA board.

Rust Kernel | *Rust*

A toy operating system kernel implemented in Rust with privileged mode according to RISC-V specification, process scheduler, etc.

SOCKS5 Proxy | *Golang*

A internet server that acts as a SOCKS5 proxy under TCP and UDP protocols. TLS hijack also implemented under trusted certificate.

An Efficient Algorithm for Semi-supervised Learning | *Python*

An algorithm for semi-supervised learning with 20% improved performance compared to traditional mean teacher method and accelerated with a designed module. The project was awarded one of the best papers in the course (2nd place).

HONORS & AWARDS

Scholarship

- 2024 Zhiyuan Honorary Scholarship (**Top 2%** in SJTU)
- 2023 Academic Excellence Scholarship
- 2023 Zhiyuan Honorary Scholarship (**Top 2%** in SJTU)
- 2022 Zhiyuan Honorary Scholarship (**Top 2%** in SJTU)

Awards

- 2024 MCM/ICM Meritorious Award

Teaching Experience

Data Structure

Teaching Assistant of Professor Huiyu Weng   *Feb. 2023 - Present*

Computer Programming

Teaching Assistant of Professor Huiyu Weng   *Sept. 2023 - Jan. 2024*

Role as teaching assistant: Giving lectures, help on code debugging and , creating exam questions, etc.

Skills

Programming Languages: C++, Python, Java, Rust, Golang, Verilog

Language:

- Mandarin (native)
- English **(EPT: Top 10 in SJTU. TOEFL: 111, R 30, L 30, S 24, W 27)**

Reference

Prof. Yong Yu   *Shanghai Jiao Tong University*
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Prof. Yonglu Li   *Shanghai Jiao Tong University*
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