

Yitao Zeng

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Github: <https://github.com/24zen0>

Portfolio: <https://24zen0.github.io>

Education

Southern University of Science and Technology (SUSTech)- Automation

2023–Present

- **GPA:** 3.86/4.0 (1/32)

Relevant Coursework: Advanced Control for Robotics (Grad), Robotic Motion & Control, AI & Machine Learning, Optimal Control & Estimation, Signals & Systems, Data Structures & Algorithms.

Chengdu No.7 High School

2020–2023

Skills

- **Research Related:** Proficient in Diffusion Policy, Flow Matching, Reinforcement Learning, and Machine Learning, with practical application experience in robotic deployment.
- **Robotics:** Solid understanding of robotic kinematics and dynamics; experienced with robotic deployment pipelines.
- **Frameworks & Tools:** Skilled in ROS, wandb; experienced with simulation tools including Isaac Sim, MuJoCo, and PyBullet
- **Programming Languages:** Python, Pytorch (extensive research experience), C++/C/Java/Matlab/Arduino (course project experience).
- **Environments:** Proficient in Linux development environments.

Research

[Robotic Arm Manipulation via Three-Dimensional \(3D\) Diffusion Policy](#)

Research intern, Control and Learning for Robotics and Autonomy (CLEAR) Laboratory, SUSTech (Feb 2025–present)

- Led an end-to-end pipeline for robotic manipulation, with key responsibilities including:
 - Capturing image data and converting depth images to point clouds.
 - Training 3D diffusion policy models.
 - Deploying and validating the policy on a physical manipulator.

Pointfoot and wheelfoot robot locomotion with reinforcement learning

Research intern, Control and Learning for Robotics and Autonomy (CLEAR) Laboratory, SUSTech(Apr - Sep 2025)

- Developed and tuned locomotion controllers for point-foot and wheel-foot robots using deep reinforcement learning (DRL) in the Isaac Gym simulator.
- Achieved successful sim-to-sim and sim-to-real deployment, enabling a wheel-foot robot to stably climb 18cm stairs and traverse diverse terrains in mujoco and in the real world.

Roboverse Contributions (Remote)

Research Contributor, Berkeley Artificial Intelligence Research (BAIR) Laboratory, University of California, Berkeley (July - September 2025)

- Maintained the RoboVerse codebase and successfully contributed via pull requests.
- Migrated and validated SkillBlender tasks within RoboVerse to ensure environmental and benchmarking parity.

TPT-Bench Dataset

Research Intern, Robotics and Computer Vision Laboratory (RCV) Laboratory SUSTech (Dec 2024–March 2025)

- Contributed to the creation of "A Target-Person-Tracking Dataset for Personalized Robot Assistance with Single-Path Supervised Annotation" under the supervision of IEEE Fellow Prof. Hong Zhang.
- Key contributions included performing high-quality supervised annotation and collecting data.

More projects could be seen in my [portfolio](#)

Awards & Honors

- **First Prize Scholarship(rank 3/188)**, SUSTech
- **Da Vinci Challenge Camp**, *Competition, SUSTech (July 2024)*
 - **Platinum Award** (Rank 1 out of 6 teams)
 - **Sole "Best Functional Design Award"**
 - Designed and built an autonomous vehicle actuated through Arduino language with a robotic claw for block retrieval; independently led the navigation and control module.
- **Tron Camp**, *Competition, LimX Dynamics (July-August 2025)*
 - **Sole "Outstanding Team Award" recipient (the youngest finalist)**
 - Independently devised a reinforcement-learning control strategy enabling a wheel-legged robot to climb stairs in a real environment.
- **Chinese National Challenge Cup**, *Competition, Ministry of Education of Guangdong (July-August 2025)*
 - **Provincial Gold Medal (rank 4th in the name list)**
 - Played a pivotal role in the project's final phase by refining the technical narrative and presentation of a **robotic fishing vessel** project,, which was instrumental in securing the provincial gold medal. Led communications with expert panels to articulate the project's value and integrate feedback for future roadmap planning.

- **National Foreign Language Contest in Translation** (English):
 - **First place**, SUSTech (2023)
 - **Silver Award**, Guangdong Provincial Round (2024)
 - **International Communication Short Video Contest** (English):
 - **2nd Place**, SUSTech (2024)
 - **Bronze award**, Guangdong Provincial Round (2025)
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Languages

- **Chinese:** Native
- **English:** Advanced (Duolingo: 145/160; CET-4: 674/720, CET-6: 656/720)
- **French:** Beginner (School course)

Hobbies and student organizations

Swimming

- Earned **First-Class Athlete (School Level)** in **Freestyle & Butterfly (2nd Place)** in both events at the school competition)

Soccer

- **Freshman Cup:** Vice-captain, 2nd Place
- **Inter-College Cup:**
 - **2024:** 3rd Place
 - **2025:** 2nd Place

Piano

- Performance of "He's a Pirate" at an ACG (animation, comics, and games) theme event (2023).
- Performance of "Flower Dance" at the Piano Recital for the Culture and Arts Week in SUSTech(2024).

Student Red Cross Society, SUSTech

- **Member, Organization Department** (2023 - 2024)
- **Member, First-Aid Department** (2024 - 2025)
- Accumulated over **230 volunteer service hours** (2023 - 2025)