LAIEN TANG

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EDUCATION

New York University, Tandon School of Engineering Expected Graduation: 2028
M.S. Electrical Engineering | NYU Tandon FUEL Fellowship
Coursework: Linear Systems; Probability and Stochastic Processes; Foundations of Robotics
Audited: Optimal Control and Reinforcement Learning

Southwest University 2022–2026
B.Eng. Automation | GPA: 3.78/4.0 | Rank: 12/106

TECHNICAL SKILLS

Programming: C/C++, Python | **Robotics & Simulation:** ROS 2, MuJoCo, LeRobot, ACT, Issac Sim
Embedded & Control: STM32, FreeRTOS, PCB design, PID, FOC/SVPWM
Software & AI: Linux, Git/GitHub, API integration, RAG and LLM agent workflows

ROBOTICS PROJECTS

Mickey17 — Robot Imitation Learning | Independent Project Oct 2026
GitHub | Robot demo

- Built an end-to-end ACT imitation learning pipeline with LeRobot on an SO-101 arm, collecting 158 demonstrations and iterating through training, real-robot deployment, and evaluation for cube pick-and-place.
- Developed asynchronous policy execution with timestamp-aligned action queues and command blending, supporting continuous arm execution during CPU-only inference with a median latency of 321 ms.
- Evaluated filtering and scene sensitivity across 95 physical trials; at $\alpha = 0.5$, observed 80% placement success vs. 60% unfiltered and 0% vs. 30% controller stops (10 trials per setting).

Aerial Robotic Arm | Undergraduate Capstone Project Lead Oct 2025–Mar 2026
GitHub

- Led a five-person team building a lightweight aerial robotic arm, coordinating component selection, PCB design, embedded software, and motor-control implementation.
- Built a five-layer STM32/FreeRTOS software architecture separating hardware drivers, control modules, and application logic; implemented 1 kHz motor-control and 50 Hz application/sensor threads.
- Integrated encoder feedback, PID, FOC, and SVPWM into the motor-control system; designed, tested, and debugged custom PCBs and completed hardware integration.

ROS 2 & MuJoCo Robot Simulation | NYU Robotics Coursework Fall 2026

- Developed ROS 2 nodes for robot command topics and MuJoCo simulation integration; implemented camera-based ArUco marker localization in course assignments.

PROFESSIONAL EXPERIENCE

Agent Development Intern | Chuangsi Zhiyue, Chongqing, China May–Jul 2026

- Developed the core of a psychological assessment reporting system for K–12 students, converting structured data into reports through a multi-agent workflow with RAG-based knowledge retrieval.
- Implemented a writer–checker–patch loop to detect and selectively regenerate problematic report sections, delivering an initial working version for internal use.

ADDITIONAL EXPERIENCE

China Undergraduate Mathematical Contest in Modeling 2024

- Modeled kinematics and collision constraints for a connected system of ~200 segments; implemented binary-search-based collision detection. National Second Prize.

University AI Community | Co-founder Mar–Aug 2026

- Co-founded a community of ~500 members, organized salons and hackathons, and independently built its full-stack website.