Angelina Zhang

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EDUCATION

Stanford University 09/2023-06/2027

- Major: Mechanical Engineering, Minor: Computer Science, Music
- Relevant Coursework (GPA: 4.05/4): Computer Organizations and Systems (C), Programming Methodology (Python), Programming Abstractions (C++), Introduction to Embedded Systems, Product Realization: Design and Making, Mechanics of Materials

Corona del Sol High School 08/2019-05/2023

- GPA: 4.0/4.0, Rank: 1/680
- National AP Scholar with Distinction, National Merit Finalist

EXPERIENCE

Kodifly Robotics Intern 06/2025-09/2025

Github Link

- Integrated LiDAR, camera, and GPS components on a handheld platform using Linux-based systems, managing multiple hardware and software iterations to build a supportable, automated scanning tool with a user-friendly interface
- Resolved data alignment challenges by implementing Precision Time Protocol (PTP) and using GPS Pulse Per Second (PPS) signals, achieving microsecond-level timestamp accuracy
- Validated system performance through controlled tests and live deployment in MTR (Hong Kong's rapid transit system), troubleshooting hardware/software failures in real-time

Stanford Assistive Robotics and Manipulation Laboratory (ARMLab) Intern 06/2024-06/2025

Project Link

- Developed ML-driven perception algorithms linking visual/tactile input to perform advanced dexterous manipulation tasks on fruit using ROS and Python
- Designed 3D-printed components integrating DenseTact (novel optical tactile sensor developed by ARMLab) with ATI force/torque sensor for enhanced precision and control
- Trained and applied deep learning (CNNs, ResNet variants) for microforce detection, reducing error to within 0.2N

ASU Science and Engineering Experience Researcher 09/2021-08/2023

- Conducted research in the the Dynamic Systems and Control Laboratory on improving obstacle avoidance in scaled vehicle development
- Designed and assembled multiple scaled autonomous vehicles to emulate vehicle-to-vehicle communication

ACTIVITIES

Society of Women Engineers, Outreach Intern 09/2024-present

- Organized the annual OASES Mentorship Program consisting of weekly workshops, recruiting Bay Area high school students and Stanford engineers to foster professional development and networking
- Led mini-lectures and engineering projects to teach students and fostered relationships with academic communities in the Bay Area

Stanford Women In Design, Community Director 01/2024-present

- Reached out to industry professionals to provide resources and insights into career opportunities across various design fields, including fintech, venture capital, beauty, and social sectors
- Collaborated with the professional development to organize weekly meetings and an annual conference, fostering engagement and growth among participants

Stanford Space Initiative 09/2023-05/2024

- Built individualized high-power rocket from starter kit and used Openrocket to determine stability, preparing for certification with the National Association of Rocketry

SKILLS

- Languages & Systems: Python, C++, C, Java, Linux, ROS 1 & 2
- Machine Learning & Perception: PyTorch, OpenCV, TensorFlow, CNNs/ViTs, sensor fusion, SLAM