

Zizhe Zhang

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EDUCATION

University of Pennsylvania , School of Engineering and Applied Science <i>Candidate for MSE in Electrical Engineering</i> , May 2026	Philadelphia, PA
<ul style="list-style-type: none">Coursework: Linear Systems Theory, Introduction to Robotics, Applied Machine Learning	
University of California, San Diego <i>Exchange Student</i> , Jan 2023 - Mar 2023	San Diego, CA
<ul style="list-style-type: none">Major GPA: 3.85/4Coursework: Intro Deep Learning & Apps, Intro to Autonomous Vehicles	
Southeast University , School of Instrument Science and Engineering <i>BE in Measuring Control Technology & Instruments</i> , June 2024	Nanjing, China
<ul style="list-style-type: none">GPA: 85.51/100Coursework: Signal and Systems, Principles of Automatic Control, Sensor Technology	

PUBLICATION

Zhang, Zizhe, et al. "Image-Based Visual Servoing for Enhanced Cooperation of Dual-Arm Manipulation." arXiv preprint arXiv:2410.19432 (2024). **Submitted to RA-L**

PROFESSIONAL EXPERIENCE

Figueroa Robotics Lab , Research Assistant, Philadelphia, PA	Oct 2024 - Present
<ul style="list-style-type: none">Designed a shared teleoperation system control based on visual servoingDesigned a dual-arm collaborative control system based on object simulation and image-based visual servoing	
Robotic Perception and Control Lab , Research Assistant, Nanjing, China	Dec 2023 - Aug 2024
<ul style="list-style-type: none">Designed a shared teleoperation system control based on visual servoingDesigned a dual-arm collaborative control system based on object simulation and image-based visual servoing	
Schneider Electric s, Technical Intern, Shanghai, China	Jun 2023 - Aug 2023
<ul style="list-style-type: none">Engaged in IGBT thermal simulation, capacitor lifetime calculation, EMC test, Kylin project circuit design, etc.	

PROJECTS

Subsidence Detection of Mars Rover , <i>Team of 3</i>	Jun 2023 - Aug 2023
<ul style="list-style-type: none">Applied edge detection to classify the topography on Mars to avoid or alert soft ground that may lead to subsidenceDesigned a wheeled leg to detect the ground in front of the rover and analyzed the detected force signals to predict the passing ability of the rover	
Autonomous Vehicle based on GPS & DoF Camera , <i>Team of 3</i>	Jan 2023 - Mar 2023
<ul style="list-style-type: none">Utilized Python and VESC to control the robot, DoF camera to find and track lanes, centimetric GPS and PID method to record and follow pathsBrought the robot to a complete stop by using PyVesc and DepthAI libraries to run stop sign detection on the cameraEnabled the robot to respond correctly to speed limit signs by performing text detection on the camera	
Analysis of Radiation Source Signals , <i>Team of 5</i>	Jul 2021 - Sept 2021
<ul style="list-style-type: none">Used library PYTS to visualize the signals and then built up a CNN to extract the inner features of the ADS-B radio signals and classify the signals, achieving a classification accuracy of over 90	

SKILLS

Computer: C/C++, Python, MATLAB, ROS, Linux, Altium Designer, Cadence
Laboratory: Robot System Design, Robot Calibration and Manipulating, Computer Vision, etc.
Languages: Chinese (Native), English (Fluent)