408-981-1841
San Jose, CA
connorguzi@gmail.com

Connor Guzikowski

GitHub: connorguzi.github.io
LinkedIn: connor-guzikowski

EDUCATION

Bachelor of Science in Robotics Engineering 09/2020 - Present
University of California Santa Cruz
GPA: 3.68

- Main courses: Robot Manipulation, Mechatronics, Microcontroller Design, UAV Theory and Practice, Sensing and Sensor Technologies, Data Structures and Algorithms, Feedback Control Systems, Brain Inspired Machine Learning, Probability and Statistics for Engineers

- Member of engineering honors society Tau Beta Pi.

WORK EXPERIENCE

Undergraduate Research Assistant - UCSC H.A.R.E Lab 02/2023 - 09/2024
UCSC ECE Department *Santa Cruz, CA*

- Student drone pilot
- Modified plant simulator for more accurate plant health simulations
- Researched using plant health simulations to train neural network for disease detection
- Aided in development of ROS2 packages and Linux environment setup for robotic systems

Individual and Group Tutoring 09/2022 - 12/2022, 01/2024 - 03/2024
UCSC ECE Department *Santa Cruz, CA*

- Tutored for ECE13: *Computer Systems and C Programming* and ECE167: *Sensing and Sensor Technologies*
- Led office hours solo and in conjunction with teaching assistants

CITRIS Research Intern 06/2022 - 08/2022
Environmental Defense Fund *Remote*

- Researched robotic applications within the agriculture industry and analyzed their environmental impact.
- Worked as a team to create a company report.

PROJECTS

Utilizing Synthetic Plant Health Data to Train Neural Networks 06/2024
Undergraduate Thesis and Research
- Created a robot that plays a tabletop, basketball like game
- Led the design and implementation of the software on the robot
- Integrated ultrasonic sensors, stepper motors, and IR beacon detector together

Imitation Learning for Ball Catching 03/2024
Deep Learning and Robotic Manipulation
- Implemented imitation learning model to teach robot arm to catch a ball in simulation
- Model learned how to correlate ball position in cameras with target destination for arm

Power Glove 06/2023
Software and Circuit Design
- Glove that turns on and interacts with various devices using finger taps and motion of hand
- Incorporates capacitive touch sensors, IR sensors, and IMU
- Devices included laptop, RGB LED, servo motor, and piezo speaker

UAV Waypoint Following and Orbiting 03/2023
Controls and Software Design
- Runs simulation to guide a UAV to various waypoints
- UAV orbits said waypoints for a specified duration before redirecting to other waypoints.