TYLER A. FLAR

12251 Via Hacienda, El Cajon, CA 92019
tylerflar@gmail.com, (619) 569-3700

EDUCATION

Bachelor of Science, Computer Science w/ Business Minor
UC San Diego, San Diego, CA, September 27 2021 to June 20 2025
GPA: 3.786 / 4.000

PROJECT AND RESEARCH EXPERIENCE

UCSD E4E / Radio Telemetry Tracker - Project Lead Winter 2024 - Current

- Led the research and development of a cost-effective and efficient system to track small animals with high-frequency wildlife transmitters for field biologists/conservationists.
- Managed a multi-dispicplany team of mechanical engineers, electrical engineers, and software developers from college freshmen to graduate students.

UCSD E4E / Baboons on the Move - Project Lead Winter 2023 - Winter 2024

- Led the investigation and development of a tool to assist researchers in Nairobi, Kenya, with automatically tracking baboon troops using drone footage via multi-object tracking methodologies.
- Managed the daily project operations, including information sessions, recruitment, task delegation, and collaborative presentations.
- Developed, tested, and verified multiple multi-object algorithms using C++, Python, and MATLAB, which were presented in computer vision publications to help identify techniques that would assist in our solution.
- Assisted in developing a pipeline to automate parameter tuning and calculating precision and recall of multi-object algorithms.
- Led the writing of a research paper comparing our multi-object algorithm specifically developed for animal tracking with other multi-object algorithms applied to analogous datasets.

Tritons RCSC - TritonBot Lead Fall 2022 - Spring 2023

- Collaborated with a team to create a program controlling autonomous soccer vehicles for UCSD's RoboCup team.
- Implemented a system to connect autonomous vehicles to a central computer without an internet connection to be able to quickly deploy our AI and autonomous robots off-campus.
- Created a program that converts global space commands received from the central computer AI to wheel space speeds for the microcontrollers on the autonomous robots.

WORK EXPERIENCE

Cubic Transportation Systems - Systems Engineer Intern Summer 2023

- Assisted in developing a Python and DXL program for generating requirement traceability matrices quickly to help clients understand the state of requirements.
- Created SQL scripts for predefined queries, making it easy for clients to find information in the company's back-office database.
- Worked with common enterprise tools such as Microsft Excel, Jira, TestRail, SAP, and ServiceNow.

PORTFOLIO

Linkedin - https://www.linkedin.com/in/tyler-flar/

Github - https://github.com/tylerflar