2/25/2023

To Whom it May Concern,

My name is Caleb, and I am actively searching for an internship in the Robotics field for the Summer of 2023. I am currently a Master's student in Mechanical Engineering at the University of Nevada - Reno, however I received my B.S. in Computer Engineering from the University of Illinois at Urbana - Champaign.

In January 2023 I began working as Graduate Research Assistant at UNR researching Autonomy, Perception, Controls and Field Robotics with Dr. Petros Voulgaris and Dr. Christos Papachristos. Even though I started only 2 months ago I have become heavily involved with a number of projects related to robotics. One project is the addition of an autonomy stack to a DJI Matrice 600 Hexacopter. The goal of this project is to create a platform to test various autonomy related algorithms. My tasks include interfacing the DJI Software Development Kit with ROS and the sensors that we plan to put on board.

Another project I am working on is the development of a Simulated Environment for Autonomous Vehicles based on ROS and CARLA Simulator. This simulator is built on ROS and Gazebo and includes methods for generating pedestrians, other vehicles, and a City environment that both Aerial and Ground Based Vehicles can be tested in.

My skills prepare me best for a position that deals with Computer Science, Deep Learning or programming in Python or C++. However, I would also feel comfortable in a Mechanical Engineering or Electrical Engineering role, as I have completed many personal projects in both areas.

Thank you for considering my application. I look forward to the opportunity to discuss my qualifications in further detail.

Sincerely,

Caleb Patton