Hunter Haglid

2375 Willowbrook Cir, West Lafayette, IN 47906
(201)410-5047 hhaglid@purdue.edu haglid.dev linkedin.com/in/hunter-haglid github.com/hunter314

Education

Purdue University, West Lafayette, IN Class of 2024, **Expected May 2023**
Bachelor of Science, Computer Science Honors, Mathematics **Cumulative GPA: 3.95**

Technical Skills

Languages
Experienced: Java, C, Python
Proficient: Javascript, C#, Julia, SQL

Libraries and Frameworks
Experienced: NumPy, OpenCV, Django, React.js
Proficient: Tensorflow, Keras

Experience

Research Assistant - Purdue University, West Lafayette, IN May 2021 - Present
- Led a subteam of 7 researchers to develop a control system for an autonomous object-tracking drone
- Integrated a neural network for object recognition into a **Python ROS** node for object tracking
- Simulated moving agents in Gazebo using **C++** to test the tracking system's accuracy
- Presented a poster displaying the team's progress at the Purdue Summer Research Symposium

Software Co-Lead - World Competition Underwater Vehicle Team, West Lafayette, IN September 2020 - Present
- Engineered an autonomous control system for an underwater vehicle using **OpenCV**, **Scikit-learn** and **ROS**
- Implemented **Agile software development methodologies** using **Jira** to manage a team of 11 developers
- Created a tool for stitching photos of an underwater object into a continuous photomosaic map

Python Mentor - Purdue IEEE, West Lafayette, IN April 2021
- Taught intermediate **Python** topics such as object-oriented programming through a 5-part workshop

Engineering Intern - Tsapatsaris and Associates, Ridgewood, NJ July 2019 - August 2019
- Automated a biweekly 2-hour process using VBA Scripts in **Excel**, eliminating hours of manual computation

Projects

Youndle.com LLC. - Job Search Board February 2021 - June 2021
- Worked in a student-run startup to develop a **Django**-**React.js** application in the **MVC** design pattern
- Designed frontend components using **React.js** and **CSS** to retrieve and store information through **Django REST APIs**
- Managed a **PostgreSQL** database to store information about job postings, businesses, users, and applications

CO2View - Emissions Data January 2021
- Developed a **Django/React.js** web app that provides a car's emissions data from the number on its license plate
- Migrated 40 years of EPA data into a **SQLite** database for a **Django ORM** using **Pandas** in **Python**
- Used **Javascript** to calculate and display their vehicle's percentile using z-scores, adding context to the data

GoTrainer - Computer Vision for Recording Games of Go August 2021
Used **OpenCV** and a Raspberry Pi camera to record Go games, analyze them, and upload them to a database

Dash-It Live (1st Place Hello World Hackathon) October 2020
Created a **Django** web app that predicts dining hall wait time using a **Raspberry Pi** to count Bluetooth devices

3D Truss Physics Simulator December 2019
Wrote a physics engine in **C#** to simulate indeterminate trusses using object-oriented programming

Awards & Honors

- Purdue Corporate Partners Program Scholarship — April 2021
- Dean's List and Semester Honors — December 2020, May 2021
- 1st Place - Purdue ACM AI Handwritten Digits Classifier Competition (out of 11 teams) — November 2020
- 1st Place - Purdue Hello World Hackathon (out of 55 teams) — October 2020
- AIME Qualifier, Competitor — Feb 2020

Relevant Coursework

Current: Analysis of Algorithms, Systems Programming, Numerical Methods, Probability
Complete: Data Structures and Algorithms, Computer Architecture, Object-Oriented Programming, C Programming
Linear Algebra I & II, Ordinary Differential Equations, Statistics