Kyle Williams

✉ kyle@awhi.com ☐ (720) 600-1722 in in/kyle-williams8 ☁ kylewilliams.xyz

EDUCATION

Bachelor of Computer Science
University of Central Florida · Orlando, FL · Fall 2020 – Spring 2024 · 3.90 GPA
· Graduated Cum Laude with Honors from the Burnett Honors College
· Completed classes include Computer Vision, Evolutionary Computation, Design & Analysis of Algorithms, and Network Optimization.

Masters of Computer Science
University of Central Florida · Orlando, FL · Fall 2023 – Spring 2025
· Specialization in Machine Learning

EXPERIENCE

Signals Analysis Intern
Zeta Associates   **May 2024 – June 2024, Greenwood Village, CO**
· Created a Python and X-Midas program to perform TDOA geolocation of a signal from 4 drones with UP Squared i12 computers.
· Personally coded and transmitted an encrypted BPSK signal onto an UP board with an Ettus B200 Mini and a GNSS receiver.
· Created parallelized cross-ambiguity functions to find TDOA values faster than real-time transmission using object-oriented programming.

Regal Theaters
Floor Staff   **February 2019 – March 2020, Longmont, Colorado**
· Customer service, concessions, and ticket taking for customers at a busy location.

PROJECT

Senior Design – AI Pothole Detection App
AI Model and Data Developer   September 2023 – May 2024
· Team member on two semester project that live-identifies potholes in the road, notifies the user, and uploads to a database for future use.
· Personally curated the 22239 image dataset and used YOLOv8 to create and implement the model over 200 epochs for a 0.656 mAP50.
· Awarded best senior design project in computer science out of 33 teams.

UCF Social Confessions Feed
Project Manager & Backend Developer   October 2022 – December 2022
· Directed a team of 8 in development of a full stack MERN website/app where users post anonymous messages, comment, and vote.
· Assisted in backend development using Node.js, creating login, register, update user, upvote, downvote, and delete endpoints.

License Plate AI Detection
AI Model Developer   September 2023 – December 2023
· Used an AI model with a large dataset to localize the image to the license plate, then identifies the digits on the plates with EasyOCR.
· Created neural network in Python using NumPy and CV2 over 100 epochs on a dataset of 2131 images with 640x640 images.

CERTIFICATIONS

National Merit Scholar   **NMSC,**
2020

Eagle Scout   **Boy Scouts of America,**
2020

Best Senior Design Project in CS   **University of Central Florida,**
2024

President's Honor Roll 4.0 Certificate (4 Semesters)   **University of Central Florida, 2020–**
2023

Model UN Committee Co-Chair   **KnightMUN,**
2023

SKILLS

Skills: Python (1 000+ hrs) · C (500+ hrs) · Machine Learning (400+ hrs) · HTML/CSS (100 hrs) · JavaScript (100 hrs) · X-Midas (75 hrs) Java (60 hrs) · Node.js (60 hrs) · PHP (50 hrs) · React Native (40 hrs) · SQL (40 hrs) · TensorBoard (30 hrs) · Haskell (20 hrs)