

Kyle Williams

✉ kyle@awhi.com ☎ (720) 600-1722 🌐 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)
