# Kahlen Hernani

909-672-0292 | kahlenhernani@gmail.com | www.linkedin.com/in/kahlen-hernani | https://github.com/KahlenHernani

## Education

**University of Central Florida** **Graduation 2027**
*Bachelor of Science in Computer Science* *Orlando, FL — GPA: 3.83/4.0*

## Relevant Coursework

Data Structures, Object Oriented Programming, Calculus 3, Matrix and linear Algebra, Statitics

## Projects

**Real Time Computer Vision Wizard Duel Game** | *Pygame, OpenCV, MediaPipe, GitHub* **October 2025**
- Collaborated on the development of a real time, gesture controlled game using Pygame with an object oriented architecture and centralized game loop.
- Implemented wand tracking using OpenCV by applying HSV color masking to isolate a red tipped wand, filtering noise by contour size, and tracking its position across frames.
- Traced wand motion by storing coordinate histories and rendering paths on screen; detected closed-hand gestures with MediaPipe and classified drawn spell shapes by counting vertices using NumPy.

**AI Agent Powered Smart Scheduling Platform** | *Gemini API, ADK, Flask, GitHub* **September 2025**
- Developed a smart scheduling platform using autonomous AI agents to manage academic deadlines, calendar events, and user stress levels.
- Built a syllabus ingestion agent using the Gemini API and ADK to extract deadlines from PDF syllabus and automatically populate calendar events for students.
- Implemented a conversational calendar agent that maintains a JSON based event store with stress annotations, enabling users to add, modify, and reschedule events via chat through a Flask backend.

**Pasture Biomass Prediction CNN and Multimodal ML** | *Pytorch, Pandas, Torchvision* **November 2025 – Present**
- Trained CNN models in PyTorch to predict pasture biomass from aerial imagery in a Kaggle regression competition.
- Combined image features with vegetation indices and tabular metadata to build a multimodal prediction pipeline.
- Evaluated pretrained vs. from scratch models and experimented with ensembling and regularization to improve validation performance.

**P Code Compiler and Stack-Based Virtual Machine** | *C* **August 2025 – November 2025**
- Implemented a full compiler pipeline in C, including lexical analysis, parsing, code generation, and execution via a stack-based virtual machine.
- Built a lexer to tokenizer source code character by character and a parser to detect grammatical errors and enforce language rules.
- Generated and executed PM/0 assembly instructions, managing stack frames, control flow, and runtime execution semantics.

## Extracurricular

**KnightHacks** **August 2025 – Present**
*Member | Mentorship Program Participant* *University of Central Florida*
- Joined KnightHacks Mentorship Program, collaborating with mentors to develop technical skills and software projects.
- Participated in hackathons and workshops, working in teams to design, implement, and iterate on software solutions.

**Memorial Hospital** **Jun 2023 – Jul 2023**
*Office Intern* *Miramar, Florida*
- Managed patient and nurse needs by memorizing floor layouts, locating required items, and coordinating communication across floors and incoming calls.
- Organized and distributed paperwork efficiently to ensure smooth operations for incoming patients.

## Technical Skills

**Languages**: Java, C, C++, JavaScript, HTML/CSS, Python, Java
**Developer Tools**: VS Code, Eclipse, Unity, Jupyter Notebook
**Technologies**Tailwind, Node.js, GitHub, React, React Native, Flask, ADK, Gemini API, Pygame, MediaPipe, OpenCV, Numpy, Pytorch, Pandas, Torchvision