# JACK SCHEDEL

 $\label{eq:control_control} jack@schedel.io \Leftrightarrow www.schedel.io \\ Artificial Intelligence \Leftrightarrow Embedded Systems \\$ 

#### **EDUCATION**

Combined Master's and Bachelor's of Computer Science, University of Florida

May 2025

3.38 GPA. Technical Electives focused on Artificial Intelligence, External focus on Embedded Systems

Relevant Coursework: Mathematics for Intelligent Systems\*, Advanced Data Structures\*, Machine Learning\*, Advanced Systems Programming\*, Microprocessor Applications 2\*, Operating Systems, Microprocessor Applications, Software Engineering

(\* completed by May 2024)

#### **EXPERIENCE**

# Strategy Team Lead, FSGP 2023 Champions, Solar Gators

September 2022 - Present

Developed real-time telemetry data analysis tools in Typescript to run live statistic calculations in the racetrack pit, managing the team race strategy during the 2023 Formula Sun Grand Prix, winning the overall competition.

Created static race/physics simulations using Python used in conjunction with an optimization solver to find ideal driving speed at each part of the track for optimal energy efficiency.

### Embedded Systems Intern, Oak Ridge National Laboratory

May - July 2023

Wrote embedded systems code for an authenticatable tracking system for nuclear containers to be deployed to custom PCBs using MSP430 chips. Used low-power ultra-wideband ranging to determine straight line distance between anchor devices spread around the facilities and container tags; calculating live positioning of each container.

# Fullstack Developer, Picture Yourself Publishing LLC

March 2020 - Present

Developed an interactive platform using NodeJS and React that allows user customization of pictures and text within children's stories and promotes collaboration with friends and allows the printing of hard copies of the final work as picture books. Created a custom PHP API and MySQL database and deployed them to AWS Lightsail and S3.

### **SKILLS**

Languages: Other:

C++, C, Rust, Typescript, Java, Python, PHP, MSSQL, ARM Assembly, MATLAB STM32 and MSP430 Toolchains, Optimization Solvers, Android Studio, Graphic Design

### **PROJECTS**

#### EndGame 2 (Personal Interest/Passion Project)

Summer 2023

Developed a UCI-compatible chess engine written in Rust using minimax tree-traversal over a variety of custom board analysis algorithms. Implemented alpha-beta pruning, multithreading, and position hashing to improve performance. Created out of personal interest and to learn Rust, still actively being developed and expanded upon.

### Save the City (UF AI Days Hackathon)

Fall 2022

Built an interactive mobile game in Android Studio to teach sustainable lifestyle habits to children using minigames with variable difficulties determined by a 4 dimensional linear regression model using scikit-learn trained on past user data. Built in 24 hours by a team of 4 as part of the UF AI Days Hackathon.

## Tickr (Database Systems Final Project)

Spring 2022

Created the backend framework of a stock analysis app using an Oracle SQL database and a custom-built PHP API as the final project for Information and Database Systems. Allows users to request real-time calculated statistics of a given group of stocks from a large database of stock ticker history.

#### INTERESTS

Artificial Intelligence, Computational Problem Solving, Model Compression/Edge deployment, Embedded Systems, Algorithm Optimization, Statistics/Data Analysis, Neovim, Modern Programming Languages (Rust, Go, Zig, etc.)