JACK SCHEDEL

jack@schedel.io ◇ www.schedel.io
Artificial Intelligence ◇ 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 used to determine the team race strategy during the 2023 Formula Sun Grand Prix, in which our team won 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: C++, C, Rust, Typescript, Java, Python, PHP, MSSQL, ARM Assembly, MATLAB
Other: STM32 and MSP430 Toolchains, Optimization Solvers, Android Studio, Graphic Design

PROJECTS

AutoCalibr Summer 2023
Created a variational autoencoder for 3D meshes using Keras, designed to generate new meshes using principle component analysis in the latent space. Handled comprehensive preprocessing of raw mesh data including tri conversion, volume/positioning normalization, and padding using face subdivision. Generated thousands of different random variations of each object during padding to artificially expand the dataset.

EndGame 2 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 teach sustainable lifestyle habits to children using minigames with automatically-adjusting granular difficulties determined by a 4 dimensional linear regression model trained on past user data using scikit-learn. Built in 24 hours by a team of 4.

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.)