Evan Andresen (he/him) | (813) 995-1308 | evanandresen@hotmail.com | Github | LinkedIn | Boston, MA

Software Engineer

Promising and adaptable professional eager to join an impactful team. With a wide range of skills and experiences from an intensive bachelor's program and multiple internships, I am motivated by learning and discovery towards a meaningful cause. Interests and experiences range from hardware design and embedded systems to FPGA usage.

Skills & Qualifications

Python | **C/C++** | VHDL | FPGAs | **Linux** | MATLAB | ROS | **RTOS** | Git | Tensorflow | LiDAR
Embedded Software | Java | ARM Assembly | ModelSim | SystemVerilog | UVM | Synopsys | Verdi

Titles Held: Silicon Design Verification Engineer, Software Engineer, Product Designer, AV Technician, Crew Manager

Education

B.S. Computer Engineering **May 2024**
University of Florida, Gainesville, FL GPA: 3.92

Relevant Coursework: Microprocessor Applications II/RTOS, Signals and Systems, FPGA Design, Applied Machine Learning

Professional Experience

Software Engineer *(University Program)* **August 2023 – April 2024**
Florida Power and Light Gainesville, FL

- Implemented image processing algorithms in MATLAB to test real time vehicle detection.
- Optimized Kalman vehicle predictive algorithm using iterative comparative analysis in Jupyter Notebooks.
- Applied statistical testing of vehicle prediction methods to guarantee optimal solution was found.
- Created and queried database of vehicle traffic data for testing on algorithms.
- Used ROS in Python on Ubuntu Jetson Nano to organize many threads for real-time hardware vehicle detection.
- Interfaced with multiple devices on hardware communication protocol (SPI, I2C, etc.)

Software Engineer Intern **May 2023 – August 2023**
Microsoft Hillsboro, OR

- Implemented a UVM scoreboard for design verification of an SoC AMBA debugging system.
- Studied various interfaces and components from 3rd party vendors for implementation in RTL design.
- Worked within a CentOS environment designing software and command line interface.
- Maintained code contributions through Git on the command line using branching and merging for organization.
- Organized testing plan on C++ using google test for project consistency.
- Studied and incorporated object-oriented code design as written by Robert Martin.

Software Engineer Intern **May 2022 – August 2022**
Microsoft Hillsboro, OR (Remote)

- Participated in daily stand-ups and worked using Azure DevOps to organize project progress.
- Studied Test Driven Development and SOLID principles to guarantee high quality of code.
- Created a log parser in Python to upload data from CI/CD testing onto a Kusto Database for visualization.
- Engaged in Diversity & Inclusion events maintaining social awareness and a welcoming environment.

Division Head, Technician **January 2021 – May 2024**
Stephen C. O'Connell Center Gainesville, FL

- Organized and configured audio systems/networks to prepare production equipment for concerts and events.
- Led crews of 20+ technicians in high-intensity environments to load and strike AV rigging.
- Trained junior technicians on responsibilities and technical knowledge to maintain a successful workforce.
- Increased employee engagement and participation by fostering a productive and friendly work culture.

Professional Projects

Handheld Pool Game

After learning the basics of RTOS and hardware interfacing, I used my software architecture and design skills to build a handheld pool game from scratch written in C. The game interface used LEDs, buttons, accelerometer, and a joystick and was based on writing many concurrent threads for my RTOS to track game state, physics, interfacing, and display.

Awards

- College of Engineering Dean's List
- Florida Bright Futures Academic Scholar
- University of Florida Cum Laude
- CpE Award (top 5 in engineering college)