John Lewis

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Education

University of Florida - Gainesville, Florida **Expected Graduation: May 2027**

- Bachelor of Science in Computer Engineering **GPA: 3.90**
- Dean's List Award Recipient: Spring 2024, Fall 2024, Spring 2025
- Relevant Coursework: Intro to Programming 1 and 2, Discrete Structures, Data Structures and Algorithms, Computer Organization, Digital Logic and Computer Systems, Digital Design, Operating Systems

Palm Beach State College - Lake Worth, Florida **GPA: 4.00**

- Associate in Arts awarded May 2023

Professional Experience

Engineering Intern – Florida Turbine Technologies / Kratos Defense **May 2025 - Present**

- Used control theory concepts to tune controller gains and perform Hardware-in-the-loop (HIL) testing, ensuring the controller meets expected performance specifications
- Developed and presented test plan documentation to detail the objectives, procedures and expected outcomes of upcoming tests
- Optimized MATLAB CAN data parsing script, increasing efficiency by 87% to allow for faster runtimes, as well as implemented error checking to confirm data completeness

Undergraduate Peer Instructor – Digital Logic and Computer Systems **January 2025 – May 2025**

- Held weekly office hours to guide students in improving their understanding of digital logic concepts
- Led weekly lab sections where students implement digital logic principles taught in lectures
- Created and administered lab quizzes to enforce students learning of concepts taught in lectures and labs

Technical Projects

MIPS Processor – VHDL **March 2025 – April 2025**

- Created an FPGA-based processor modeled from the Fetch-Decode-Execute cycle, which executes MIPS-type instructions given a Memory Initialization File (MIF).
- Integrated on-board RAM and Memory Mapped I/O to input and store variables and instructions, execute them, and store the result.

Game Twin – C++, Python, HTML, CSS **December 2024**

- Collaborated with a group to develop an application to recommend video games based on a past game the has user enjoyed
- Utilized a dataset with 470,000+ video games to find the best matches for the user
- Implemented sorting algorithms to rank similar games by user-chosen parameters like Metacritic rating or the amount of suggestions

Smart Sunscreen Bottle - C++ **March 2024 - April 2024**

- Worked in a team to design, 3d print, program, solder, and assemble a sunscreen bottle that alerts the user when they should reapply
- Utilized an Arduino, UV sensor, piezo, a slide switch, and an RGB LED to calculate the current UV, decide how long the user should wait before reapplying, and alert the user after that period

Technical Skills

Programming: C++, Python, HTML/CSS, VHDL, MATLAB, Tailwind CSS, React.js, ARM Assembly
Tools & Technologies: Intel Quartus, CLion, VS Code, PyCharm, QuestaSim, Linux, VirtualBox, Microsoft Visio