

John Lewis

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Education

University of Florida - Gainesville, Florida	Expected Graduation: May 2027
<ul style="list-style-type: none">Bachelor of Science in Computer EngineeringDean's List Award Recipient: Spring 2024, Fall 2024, Spring 2025Relevant Coursework: Intro to Programming 1 and 2, Discrete Structures, Data Structures and Algorithms, Computer Organization, Digital Logic and Computer Systems, Digital Design, Operating Systems	GPA: 3.90
Palm Beach State College - Lake Worth, Florida	GPA: 4.00
<ul style="list-style-type: none">Associate in Arts awarded May 2023	

Professional Experience

Engineering Intern - Florida Turbine Technologies / Kratos Defense	May 2025 - Present
<ul style="list-style-type: none">Applied control theory concepts to tune Proportional-Integral-Derivative (PID) controller gains and perform Hardware-in-the-loop (HIL) testing, ensuring the controller meets expected performance specificationsDeveloped and presented test plan documentation to detail the objectives, procedures and expected outcomes of upcoming testsOptimized 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
<ul style="list-style-type: none">Held weekly office hours to guide students in improving their understanding of digital logic conceptsLed weekly lab sections where students implement digital logic principles taught in lecturesComposed and administered lab quizzes to enforce students' learning of concepts taught in lectures and labs	

Technical Projects

MIPS Processor - VHDL	March 2025 - April 2025
<ul style="list-style-type: none">Developed 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
<ul style="list-style-type: none">Collaborated with a group to develop an application to recommend video games based on a past game user enjoyedParsed and filtered a dataset with 470,000+ video games to find the best matches for the userImplemented quick sort to rank similar games by user-chosen parameters (e.g., Metacritic rating, number of suggestions), reducing search time by 99% compared to previous implementations	
Smart Sunscreen Bottle - C++	March 2024 - April 2024
<ul style="list-style-type: none">Worked in a team to design, 3D print, program, solder, and assemble a sunscreen bottle that alerts the user when they should reapplyUtilized 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, Questa/ModelSim, Linux, VirtualBox, Microsoft Visio