WILLIAM DUNLAP

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EDUCATION

Bachelor of Science in Computer Engineering   GPA: 3.6/4.0
University of Florida, Herbert Wertheim College of Engineering   Expected Graduation May 2026
- Relevant coursework: Operating Systems, Microprocessor Applications 2 (Real-time Operating Systems), Digital Logic and Computer Systems, Applications of Discrete Structures, Data Structures and Algorithms, Circuits 1, Computer Organization, Database Systems

Associate in Arts   GPA: 4.0/4.0
Eastern Florida State College (EFSC)   Graduated May 2023
- Relevant coursework: Communication, C++ programming, Calculus I, II, III, Physics I, II
- Competed in the 2021 EFSC Coding Competition

SKILLS AND AWARDS

Hard Skills: Python, C++, Qt GUI development, Embedded C, Real-time Operating Systems, MATLAB, 3D Printing, Soldering, SolidWorks (Certified), Onshape, Troubleshooting, Microsoft Office
Soft Skills: Attention To Detail, Analytical Thinking, Problem Solving, Communication, Teamwork, Creativity, Adaptability
Awards: Phi Theta Kappa Honors Society member, Six semesters on the EFSC President's list, Eastern Florida State College Honors Graduate

EXPERIENCE

University of Florida, Machine Intelligence Lab
Active Member   September 2025 – Current
- Contributed to early-stage design of components used in autonomous boats and submarines
- Integrated custom components into the lab's simulation environment to test functionality

Amentum (Kennedy Space Center, Formerly Jacobs)
Hazard and Gas Detection Lab (COMET Intern)   May 2025 – August 2025
- Developed a Qt based application to visualize data from mass spectrometer-based leak detectors with an intuitive GU
- Automated data interpolation that previously took up to a week, reducing analysis and fault detection time to under 2 hours
- Completed the full software development lifecycle, delivering an updated version that improved program speed by 4.7×
- Implemented new features based on user feedback to enhance usability and functionality
- Assisted with EMI testing of multiple Hazard and Gas Detection Lab components

Jacobs (Kennedy Space Center)
Hazard and Gas Detection Lab (COMET Intern)   May 2024 – August 2024
- Worked in the Hazard and Gas Detection Lab to learn the fundamentals of the Electrical engineering design process
- Contributed to a control system's software codebase, implementing key features for enhanced system performance
- Designed and fabricated a new control system with significantly improved capabilities over the previous version
- Conducted comprehensive testing, integrating my software with the new control system to ensure seamless operation

STEPUP: The Student Transition and Enhanced Preparation for Undergraduates Program
STEPUP Scholar   June 2023 – August 2023
- Selected to participate in an intensive program for engineering majors entering the University of Florida. Coursework included 7 rigorous workshops to develop hard and soft skills such as: Calculus, Chemistry, Physics, Research, Communication, and Teamwork
- Collaborated with other students to write a scientific research paper to publish in a peer-reviewed journal
- Led a team to design, construct and program an articulated desk lamp with inbuilt clock functionality, using an Arduino starter kit
- Established a professional network through facility tours and presentations led by corporate representatives in many engineering industries

IEEE, Open Project Space
Active Member   August 2023 – May 2024
- Attended weekly lectures to gain proficiency in multiple aspects of embedded systems
- Worked with an Arduino Nano to construct multiple circuits with different functions
- Learned the basics of hardware and software implementation such as interrupts, serial communication, and Arduino C programming

FIRST Robotics Team 233 (Pink Team)
Mechanical Safety Captain   January 2020 – May 2023
- Worked on a team with NASA Mentors to design a robot capable of performing a given task
- Used CAD to implement mechanical features in the safest way possible

Suntree United Methodist Church
Production Coordinator (Volunteer)   April 2019 – June 2023
- Managed broadcast audio and video for three hours of streaming content per week on YouTube, Twitch, and Facebook using open source, streaming and production applications (OBS, Bitfocus Companion, Dante, ProPresenter, Light Factory)

PROJECTS

Articulated Desk Lamp with Clock Functionality – "Autolightic"   June 2023 – August 2023
- Lead a team through all steps of the engineering design process to complete an articulated desk lamp with a built-in clock
- Used microcontrollers to sense sunlight and optimize the direction of the light beam while displaying the time on an LCD

ChompBooks Web Bookstore   January 2025 – April 2025
- Scrum Manager for team developing an online bookstore using Firebase for authentication and data storage
- Coordinated sprints, task tracking, and team collaboration to meet sprint milestones and deliver core features on time