Davis Hood

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EDUCATION:

Syracuse University, College of Engineering and Computer Science Bachelor of Science, Electrical Engineering

Anticipated May 2026

GPA: 3.06

SKILLS:

Hardware: Microprocessors, signal generators, digital signal processing, digital logic design, analog and digital circuits *Software:* Visual Studio Code, Quartus Prime, Digilent WaveForms, Multisim, Docker, Github, Wordpress, Raven, Power World Simulator, MatLab

Languages: C, C++, CSS, HTML, JAVA, PHP, Python, VHDL

Interests: Finding solutions to complex electrical problems using applied prototyping, research, and design techniques

Other: English, French

ENGINEERING EXPERIENCE:

Engineering Intern, HII Mission-Technologies, Syracuse NY

June 2025 – August 2025

- Collaborated with a team of fellow engineering interns researching, designing, and developing a custom radio transceiver. Contributed GUI front-end and RF back-end code integration for the radio transceiver.
- Conducted lab testing of complex electrical products via signal generators and custom code scripts for data analysis.
- Documented all relevant resources, methodology developed, results, and high-level conclusions for all coworkers working on these complex electrical products.
- Presented my contributions, rationale, and lessons learned to coworkers within the company at the end of the internship.

AEW Facilitator, Syracuse University, Syracuse NY

August 2024 – December 2024

- Facilitated Calculus III to engineering Sophomores via curated lesson plans and exercises
- Collaborated with fellow AEW Facilitators to develop program content, evaluate problems, and troubleshoot scenarios
- Reinforced classroom content from math courses to improve student understanding of Calculus III

Invent@SU, Syracuse University, Syracuse NY

May 2024 – June 2024

- As part of a team, invented new technology by designing an electromagnetic docking support system for manual wheelchair lifts
- Presented a business plan supporting the justification for the commercialization of the invention, conducted a thorough patent search, and computed design calculations, all within budget
- Designed and created the circuitry to dictate the control system, input device, and power the electromagnet. Employed an Arduino board, various circuit elements, and C++ code software to ensure docking system functionality
- Presented findings to donors and potential stakeholders. Team efforts resulted in achieving 2nd place

Undergraduate Research Assistant, Bioacoustics and Behavioral Ecology Lab, Syracuse University January 2024 - Present

- Employing audio and kinesthetic data extracted from the field to analyze signal data, developing custom programming to better understand the behavior of marine animals
- Project scope includes individual whale identification capabilities via whale calls in addition to improving measurement accuracy utilizing a custom drone equipped with a LIDAR sensor, GPS module, and a module to track drone orientation

IT Manager, The Daily Orange, Syracuse NY

January 2023 – September 2025

- Employ technical experience for web development, server maintenance, and daily support for Daily Orange staff with computer problems in a time-critical journalism publishing organization
- Collaborated with designers and other web developers to create a new Daily Orange webpage layout. Implemented PHP, HTML, CSS, and JavaScript code in a GitHub repository to improve user interfaces
- Compile internal procedures and references for current and future employees to accomplish Daily Orange publishing tasks, improving overall Daily Orange organizational efficiency

LEADERSHIP/ACTIVITIES:

ECS Excelerator, Syracuse University
Goon Squad Volunteer, Syracuse University
Research and Development Club Programming Chair, Syracuse University
Ridge High School Boys Volleyball Varsity Captain, Basking Ridge NJ
William Annin Middle School Girls Volleyball Assistant Coach, Basking Ridge NJ

March 2023 – March 2025 August 2023, August 2024 January 2023 – May 2023 March 2022 - May 2022 September 2021 - November 2021