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Deliver impactful solutions by leveraging technical skills and fostering an environment built on teamwork and a shared passion for growth.

EDUCATION

Michigan State University - East Lansing, MI May 2026
Bachelor of Science, Electrical Engineering (Additional Major: Computer Engineering) GPA: 3.98

Skills: Python, C/C++, MATLAB, Bash, Unix, FreeRTOS, ROS, LTspice, Verilog, Vivado, Altium Designer

Involvement: MSU Software Engineering and Computing Society (Senior Member)

EXPERIENCE

DayDream Inc. - Remote

Embedded Software Engineer Intern August 2024 - Present

- Used Altium Designer to draft initial designs for a smart AR device powered by the ESP32 SoC, performing schematic capture and PCB layout.
- Developed C++ code to implement abstraction layers for hardware interactions, facilitating seamless integration with higher-level software components.
- Made use of FreeRTOS to manage concurrent tasks and optimize resource utilization, ensuring efficient and reliable system performance.

KPIT Technologies - Novi, MI

Software Development Intern June - August 2024

- Developed a formatting tool using Python to help with the implementation of MISRA C guidelines for generated C scripts, identifying over 90% of compliance violations and reducing manual review time.
- Automated the generation of Lauterbach PRACTICE test scripts using Excel and Python, lowering the prerequisite technical barrier and accelerating script development.
- Prepared project documentation and presentations to keep key stakeholders apprised of progress, and obtain their feedback.

Physical Ultrasonics, Microscopy and Acoustics (PUMA) Lab - East Lansing, MI

Undergraduate Research Assistant September 2022 - May 2024

- Employed data augmentation and preprocessing techniques to enhance the diversity of time-series datasets using MATLAB.
 - Used Python to implement algorithms to compute and visualize material properties from signals collected via ultrasonic testing, obtaining results within 5% of accepted values.
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PROJECTS

PetQs: Animal Sentiment Analysis

September 2023 - May 2024

- Worked as part of a team of 4 to develop an AI-powered web app to determine animal sentiment from user-uploaded video input, leveraging Git for version control and collaboration.
- Developed backend using Flask framework, creating REST APIs to allow users to post media and linking inputs to the model.

STARX-BLE: Wireless IMU Integration

November 2023 - June 2024

- Designed and implemented embedded system to transmit orientation and acceleration data from BNO055 IMU using BLE technology for real-time monitoring and control of an exoskeleton.
- Used ATmega328 microcontrollers as BLclearE server and client devices to facilitate seamless data exchange at 15Hz intervals, reducing wire usage in exoskeleton by 20%