Alex Thompson

West Lafayette, IN | alex.thompson@email.com | linkedin.com/in/alexthompson | github.com/alexthompson

Education

Purdue University, West Lafayette, IN

Bachelor of Science in Computer Engineering

Expected Graduation: May 2025 | GPA: 3.7/4.0

Relevant Coursework: Operating Systems, Embedded Systems, Digital Logic Design, Machine Learning

Experience

Undergraduate Research Assistant | Purdue University | Jan 2024 - Present

- Developed Python and MATLAB scripts for signal processing and data visualization

- Collaborated on designing embedded systems for biomedical sensor applications

- Collected and cleaned datasets to support machine learning model development

Hardware Engineering Intern | U.S. Government Contractor | Summer 2023

- Designed and tested circuits for secure communications hardware

- Used lab tools (oscilloscopes, logic analyzers) for validation

- Contributed to documentation and schematic capture using Altium

Technical Skills

- Programming: C, C++, Python, Java, Verilog

- Tools: Git, Docker, STM32CubeIDE, Vivado, Keil, Linux, Jupyter

- Hardware: STM32, ESP32, FPGAs, Raspberry Pi, PCB Design (KiCad/Altium)

- Other: REST APIs, MySQL, Bash, PyTorch, TensorFlow

Projects

Senior Design Project -- eInk Flashcard System

- Built a low-power microcontroller-based flashcard device with eInk display

- Designed and fabricated custom PCB, handled power management, and user interface

- Integrated storage, LED control, and capacitive touch interface

Soft Skills

- Team Collaboration

- Technical Documentation

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- Problem Solving

- Communication