Elizabeth Levin

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Hi. My name is Elizabeth Levin. I'm a computer science and robotics student graduating in 2027. I am a passionate engineer who loves to solve complex problems and develop innovative solutions. In my free time, I like to tinker with electronics and practice martial arts.

Education

Worcester Polytechnic Institute

- BS in Computer Science and Robotics Engineering
- GPA: 3.9/4.0
- Expected Graduation: 2027

Experience

Draper - Embedded Software Engineering Intern

Jun 2025 - Aug 2025

- Built a cross-platform embedded HAL with a modular build system, reducing code duplication and enabling application portability across architectures
- Collected requirements across multiple teams to guide HAL features and priorities
- Built a containerized toolchain for embedded systems, reducing setup time and standardizing development across the department

NEST Lab - Student Robotics Researcher

Feb 2025 - Jun 2025

- Researched novel methods for building C-SLAM systems using ROS and MATLAB for mapping unknown environments in swarm robotics
- Implemented frontier-based exploration and pathfinding across multiple robots using a merged global map
- Simulated testing environments using Gazebo to model robot dynamics

Walmart Advanced Systems and Robotics - Robotics Software Engineering Intern

Jun 2024 - Aug 2024

- Served as a member of the Reliability team to enhance testing processes
- Designed and wrote automation software for robotic fixtures to simulate real world conditions for reliability testing
- Developed new system implementation to utilize small microcontrollers in testing fixtures

Projects

Pixis-Slide

- Developed open-source beginner and budget friendly musical synthesizer using an ESP32
- Optimized performance by leveraging an RTOS to run both ESP32 cores, dedicating one to live audio synthesis and the other to USB communications

LSToday

- Created Android Version of popular high school scheduling app
- Used Firestore no-SQL database, with a python web api, and Google Analytics integration
- Managed a team of other student developers on both IOS and Android

Skills

Technical Skills: Embedded Systems, Robotics, Mobile Development, Web Development **Languages and Frameworks**: Python, C, C++, Java, JavaScript, Kotlin, SQL, Firebase, ROS, Pytorch **Spoken Languages**: English (native), Russian (Fluent)