PERI HASSANZADEH

+1(570) 764-7631 ◇ Pittsburgh, PA
perihassanzadeh@gmail.com ◇ linkedin.com/in/perihassanzadeh ◇ https://perihassanzadeh.github.io/

EDUCATION

MS Electrical and Computer Engineering, University of Pittsburgh — May 2025
– Awarded Full Tuition Merit Scholarship

BS Computer Engineering, University of Pittsburgh — Dec 2022

SKILLS

Programming	C (MISRA) | Embedded C | C++ | Python | Linux
Tools	STM32 Toolchain | Debugging | Yocto | Altium Designer | MATLAB
PM	Git | JIRA | Confluence | Agile | Technical Communication | Stakeholder Mgt.

EXPERIENCE

Embedded Software Engineer - Navy Sustainment — Jan 2025 - Present
Gecko Robotics — *Pittsburgh, PA*

- Architected and implemented the transition from mechanical to **software-automated probe lifting mechanisms** for the ship deck inspection robot, reducing manual intervention by **80%** and enabling high-precision scanning.
- Developed and delivered **real-time** motor and actuator controller **firmware** in **C**, using **CAN** for command and **SPI** for driver communication, which improved first-pass fault detection rate by **45%**.
- Collaborated with the Hardware Platform team on system security to harden the **custom Linux OS** using **Yocto**, targeting IL5 compliance for high-assurance systems.
- Initiated and standardized the firmware and software release process across 6 embedded projects, ensuring stable releases and using **JIRA/Git** to manage version control and deployment for the ship deck inspection robotic system.

Graduate Student Researcher — Jan 2023 - May 2025
NSF Center for Space, High Performance and Resilient Computing — *Pittsburgh, PA*

- Led the Mission-Critical Sensor Processing Task, managing the **full project lifecycle** from proposal to delivery and **coordinating stakeholders** on critical design elements for multiple complex projects.
- Served as the **primary technical interface** for industry sponsors, **translating customer requirements** into actionable development objectives and **ensuring on-time delivery** of contractual commitments.
- Proactively managed project schedules and resource allocation, identifying and **resolving technical blockers** to maintain momentum and ensure **successful project outcomes** across parallel initiatives.

Graduate Engineering Intern — May 2024 - Aug 2024
SpaceX - Starlink Product Engineering — *Hawthorne, CA*

- Developed an automated **real-time** test environment for Wi-Fi interference analysis, enhancing **system reliability and performance** through telemetry visualization.
- Designed and deployed a network-accessible automated test execution interface, significantly improving technician **usability** and **reducing operational errors by 60%**.
- Owned the **complete project lifecycle** for Starlink User Terminal testing repository **integration**, from design and implementation to documentation, ensuring seamless team adoption.

PROJECTS

Formula Student Led sensor prototype development and integration for aerodynamic subsystem; resulting in first-place innovation award at competition.

Disarm-It!: Bop-It Spinoff Designed and implemented embedded firmware for an interactive game using multiple digital sensors.

CERTIFICATIONS

Certified Associate in Project Management (CAPM), Project Management Institute (PMI) — Oct 2025