

GWEN LITWAK

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EDUCATION

Computer Engineering B.S. • University Of Pittsburgh

- Cumulative 3.409 GPA, Graduated Cum Laude
- Honors Student in Swanson School of Engineering and Dean's List

Relevant Coursework

- Data Structures and Algorithms
- Software Construction and Evolution
- Algorithms for Big Data
- Systems and Project Engineering
- Information Security
- Computer Networks

SKILLS

Technical Skills

- Languages: Python, Java, C, C++, C#, Matlab
- Version Control: Git and GitHub
- Operating Systems: Linux, Windows
- Software Design Patterns and Life Cycle
- User Interface Design
- Network Protocols
- Security Controls and Frameworks
- Agile Software Development

EXPERIENCE

Software Engineer Intern • Thomas Instrumentation • May 2022 – August 2022

- Received hands-on experience in full manufacturing process for embedded systems projects using C and C++
- Contributed to the implementation of and refactoring of communications and I/O for industrial systems.
- Optimized and maintained in-house software systems for employee time tracking, scheduling, and payroll processing using C#.

PROJECTS

Pittsburgh Train System Simulation (Python)

- Successfully built software simulator for the Pittsburgh Light Rail North Shore Extension public transportation system the Pittsburgh train system as part of semester-long group project.
- Designed controller modules, communication protocols, and safety protocols.
- Independently defined project requirements and continuously adapted the system using agile framework to evolving specifications in a simulation of a real-world environment.

Low-Power Phone Charger Prototype (C)

- Contributed to the development of software and debugging of a low-power, portable phone charger.
- Met customer requirements through iterative development.

HotCiv Game Recreation (Java)

- Collaborated with a small team in recreating the HotCiv game in Java.
- Designed and implemented unit and component testable software system and applied software design pattern to enhance code quality and maintainability.
- Utilized version control (Git) and branching workflows for collaborative development using an agile framework in combination with pair programming and code reviews.

LEADERSHIP

Lead Staff • @Shore Service • August 2015 – September 2023

- Managed, trained, and worked with a team to process and expedite linen orders, which required speed, attention to detail, flexibility, and leadership skills.

Board Member of Pitt Competitive Climbing Team • May 2021 – May 2023

- Dedicated 15 hours per week to training and leadership. Managed internal and external media relations and communications on behalf of the team.

Board Member of Pitt Recreational Climbing Club • August 2022 – May 2023

- Planned logistics for regular events, competitions, outdoors trips.
- Developed new program specifically for students who identify as Women/LGBTQ+/BIPOC.