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 in C++
- Software Construction and Evolution in Java
- Algorithms for Big Data
- Systems and Project Engineering in Python
- Algorithmic Thinking
- Information Security
- Computer Networks

TECHNICAL SKILLS

- Programming Languages: Python, Java, C, C++, C#, Matlab
- Version Control: Git and GitHub
- User Interface Design: Python, C#
- IDEs: Visual Studio, VS Code, IntelliJ IDEA
- Operating Systems: Linux, Windows
- Software and Hardware Systems Integration
- Agile Software Development Methodologies: Scum, Kanban
- Network Protocols
- Security Controls and Frameworks
- Microprocessor Programming: C, C++

RELEVENT 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 and documented project requirements and continuously adapted the system using agile framework to evolving specifications in a dynamic simulation of a real-world environment with limited guidance.

Low-Power Phone Charger Prototype (C)

- Assisted in the software development 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.