

QUINN LIU

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EDUCATION

University of Pennsylvania - School of Engineering and Applied Science

Philadelphia, PA

Bachelor of Science in Computer Science, Minors in Design and Math

GPA: 3.32

Expected: May 2025

- **Relevant Coursework:** Data Structures and Algorithms, Operating Systems, UI/UX, Embedded Systems, Big Data Analytics, Artificial Intelligence, Computer System Organization and Design, Programming Languages and Techniques I & II.

WORK EXPERIENCE

Software Engineering Intern - Symbotic

May 2023 – Aug 2023

A leader in the warehouse robotics space, Symbotic builds and operates AI-powered automated warehouse systems for large distributors, Walmart and Target.

- Created and analyzed Python script tests for all UI functionality in Symbotic stack as a part of UI Test Automation team. Applications built on .NET and WPF frameworks and tested using SmartBear TestComplete software.
- Developed a PowerShell script for seamless integration with Symbotic's Automated Test Framework, automating UI test execution and logging, improving test execution efficiency by ~75%.
- Created 40% of Backpack functionality testing methods in the Symbotic tech stack.
- Skills Used: Microsoft Azure Environments, Git version control, Python, Powershell.

Application Development Intern - Voice Dream LLC

May 2022 – Aug 2022

- Worked on sailor-oriented WatchOS weather app using Swift Programming Language.
- Fetched tide and current data utilizing NOAA RESTful APIs to then generate forecasts using tide & current prediction formulas. Additional forecast data gathered using WeatherKit Swift API.

PROJECT EXPERIENCE

Red Door Inventory Manager

Spring 2024

- Developing an end-to-end web & mobile application with JavaScript, React Native, and Firebase to create a user-friendly inventory management application for 50+ active users.
- Implementing Firebase operations for efficient CRUD functionalities in real time database.
- Facilitating regular developer-client meetings to ensure a comprehensive and engaging custom solution, creating a MVP by 4 months.

Penn OS

Fall 2023

- Implemented a User-level, UNIX-like operating system comprising of a shell, scheduler, and file system in C.
- Simulated multiprocessing and file system with round-robin scheduler and file allocation table, respectively.

Snake Game

Fall 2021

- Implemented standard Snake gameplay in Java. Utilizes Java Swing library, unit testing, and save state functionality.

PROGRAMMING LANGUAGES AND TECHNICAL TOOLS

- **Proficient:** Java, Python, C, React.js, Firebase, SQL, Pandas, Git, Figma, Next.js, HTML, CSS, JavaScript/Typescript
- **Basic Experience:** PowerShell, PyTorch, PySpark, Tensorflow, Swift
- **Design Tools** – Adobe Illustrator and Photoshop, Blender

LEADERSHIP EXPERIENCE

President - Theta Tau Professional Engineering Fraternity

Winter 2023 – Present

- President of co-ed, preprofessional engineering fraternity with 80+ members. Lead executive board with 15+ members.
- Leading transformative initiatives in club recruitment, professional development, and community building.
- Launched new "Career Paths" recruiting guides for 5+ different industries.

Head Counselor - New England Youth Chinese Summer Camp

August 2018 – August 2023

- Recruited, trained, and mentored all 34 camp staff members throughout the year.
- Coordinated organizational and logistical planning for camp-wide activities for hundreds of campers.
- Ensured camper and staff safety through development, maintenance, and enforcement of camp protocols.