# Shiqi (Cathy) Wu

**८** +1 (240) 665-9547 **☑** cathyywu05@gmail.com **iii** linkedin.com/in/shiqicathywu/ **۞** github.com/cathyswu

#### **EDUCATION**

#### University of Maryland, College Park

College Park, MD

Bachelor of Science, Computer Science and Mathematics; GPA: 3.92

May 2026

- Relevant Courses: Data Structures & Algorithms, Organization of Programming Languages, Computer Systems, Object Oriented Programming, Discrete Mathematics, Applied Probability and Statistics, Linear Algebra, Calculus I-III
- Honors/Awards: Computer Science Departmental Honors, Design Cultures & Creativity Honors College, Dean's List

#### **EXPERIENCE**

# Data & Analytics Intern

Dec. 2023 - Feb. 2024

KPMG

McLean, VA

- Utilized Power BI for data cleaning and visualization, improving accuracy and accessibility
- Conducted data analysis to manipulate multiple large datasets containing 1,000+ records from Excel MS
- Collaborated with a group of 4 to address healthy equity issues and present data-driven solutions

# Student Software Engineer

Sep. 2024 - Present

Warriors Legacy Care Project - App Development Club

College Park, MD

- Develop a mobile application using React Native and TypeScript to provide a unified platform for veterans
- Design and implement a user registration system with secure sign-in, sign-out, and ID.me verification
- Integrate mapping features to display available service providers and implement flexible scheduling
- Collaborate in a team of 9 using the Agile methodology, utilizing sprints for continuous improvement

#### Teaching Assistant - Object-Oriented Programming II

Aug. 2024 - Present

UMD Department of Computer Science

College Park, MD

- Collaborate with a team of 25 teaching assistants to grade projects, exams, and worksheets
- Hold weekly office hours, assisting 450+ students with concepts in Java, data structures, and algorithms
- Guide students in debugging projects and creating effective test cases to improve code coverage and style

#### **Guild Participant**

Jul. 2023 - Aug. 2023

Break Through Tech

College Park, MD

- Collaborated with a team of 3 to develop an app using JavaScript, targeted to help students manage finances
- Utilized Thunkable to design the app prototype and implement secure authentication protocols
- Delivered presentation to 50+ peers and mentors, showcasing a user-friendly interface and robust functionality

### PROJECTS

# Personal Wishlist % () | MongoDB, Express.js, React, Node.js

Aug. 2024

- Built a full-stack web application from scratch using the MERN stack to express a personal wishlist
- Created a dynamic front-end and responsive UI features to enhance accessibility
- Managed back-end data with MongoDB, and thoroughly tested efficient database operations using Postman
- Developed RESTful APIs and deployed the application on Render to provide a functional live environment

#### Shell Implementation $\mid C, Linux$

Jul. 2024

- Developed a custom shell in C that parses and executes commands with features similar to Unix shells
- Implemented logical operators, input/output redirection, pipes, and subshells for enhanced functionality
- Managed parent and child processes using system calls (fork, execvp, dup2, pipe) to handle commands
- Utilized perror for error handling to provide informative feedback on command failures

#### TECHNICAL SKILLS

Languages: Java, Python, C, HTML, CSS, JavaScript, TypeScript, OCaml, Rust, AVR Assembly, R, LaTeX

Technologies: Git/GitHub, React, React Native, Node.js, Power BI, Linux/Unix, RESTful API, Postman, MATLAB,

Overleaf, Visual Studio Code, Eclipse IDE, Microsoft Office Suite, MacOS, Windows

**Certifications:** Responsive Web Design (freeCodeCamp)