Kate Lu

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EDUCATION

Pennsylvania State University, State College, PA

August 2018 - December 2022

Bachelor of Science in Computer Science, Minor in Mathematics

- **GPA:** 3.5/4.0
- Coursework: Data Structures and Algorithms, Operating Systems Design & Construction, Computer Organization and Design, Database Management Systems, Computer Networks, Machine Learning and AI, Deep Learning Algorithms

WORK EXPERIENCE

Waah Chao Inc Remote, US

Software Engineer Intern

October 2023 - Present

- Developed a responsive, user-friendly website using SvelteKit, Tailwind CSS
- Enhanced security and data reliability by integrating **Firebase** for user authentication and real-time database management
- Actively contributed to an **Agile** team, participating in bi-weekly sprints, daily stand-ups, sprint planning, and retrospectives
- Maintained high code quality by utilizing **Git** for source code management, conducting regular pull requests and code reviews
- Adapted to the fast-paced, dynamic startup culture, and worked closely with UI/UX designers to implement designs into frontend

PROJECT EXPERIENCE

Jobify - Job Tracking Application https://jobify-dbni.onrender.com/

July 2023 - August 2023

- Designed and developed an interactive web application utilizing a **MERN** (MongoDB, Express, React, NodeJS) stack to assist users in managing and organizing job information
- Implemented robust authentication and authorization mechanism using **JWT**
- Provided full CRUD (Create, Read, Update, Delete) functionality for information management
- Successfully deployed the application to **Render** for access

Full Stack E-Commerce Website

March 2023 - May 2023

- Developed a Full Stack E-commerce website, offering intuitive user shopping experiences
- Built a responsive front-end using **Angular**, implementing features such as product listings, shopping cart functionality, user authentication, and payment integration
- Developed a robust backend using **Spring Boot**, creating **RESTful APIs** to manage product catalog, user accounts, orders, and payment processing
- Integrated the application with a **SQL** database via **Spring Data JPA**, managing entities such as products, users, orders, and payment details

Virtual Memory Manager Implementation

October 2022 - December 2022

- Designed and implemented a Virtual Memory Manager in C on a **Linux** platform, demonstrating a deep understanding of operating systems, memory management, and paging algorithms
- Utilized debugging tools such as **GDB**

SKILLS

- **Programming Languages:** Java, C/C++, Python, JavaScript, TypeScript, HTML/CSS, SQL
- Frameworks and libraries: React, Vue.js, Angular, Spring, jQuery, Node.js, Next.js, Express.js, Bootstrap, SvelteKit, Tailwind CSS, Material-UI
- Databases: MySQL, MongoDB, PostgreSQL
- Tools: Git, Agile, Unix/Linux, RESTful APIs, AWS, Firebase, JIRA, Postman, Jupyter