

## MARY NANSIKOMBI

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### EDUCATION

#### Oregon State University

Anticipated graduation date August 2025

B.S. in Computer Science(Honors) | Minor in Business

GPA 3.72

- **Relevant Coursework:** Data Structures, Computer Architecture and Assembly Language, Analysis of Algorithms, Introduction to Security, Operating Systems, Software Engineering Fundamentals

### WORK EXPERIENCE

#### University Housing and Dining Services(Oregon State University)

Corvallis, OR

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Community Assistant

Jun-2022 - June-2024

- Facilitated collaboration between technical and non-technical departments leading to improved collaboration and streamlined processes in apartment operations.
- Handled administrative tasks, including data entry for student apartment allocations, ensuring seamless move-in and move-out process for students with families
- Worked in a team of six, handling conflict management, lockouts, policy violations, and offering mental support, enhancing student safety and well-being.
- Created a supportive environment for students by answering their questions and organizing events that promoted diversity making international students feel welcome

### CLASS PROJECTS

- Co-developed a health metric tracker microservice using **React**, **Node.js**, and **JavaScript** within an Agile framework, enabling monitoring of heart rate, blood sugar, and pressure to improve user health outcomes.
- Developing a front-end system for a resume application using **Python**, **JavaScript**, **HTML**, and **CSS** to help students streamline job applications.
- Gained experience in low-level systems programming by developing solutions for coding projects in C.
- Developed client-server technologies using **REST API**, **Node.js**, and **PHP** for web applications.
- Developed unit and integration tests in JavaScript using Jest to verify application features and component integration, ensuring accurate performance and functionality.
- Developed end-to-end tests with **Cypress** to ensure full application functionality, deployed using GitHub Pages with **CI/CD** integration.
- Developed a restaurant application simulator using object-oriented programming, applying encapsulation, polymorphism, and inheritance to streamline menu creation and secure sensitive sales information.
- Utilized memory management techniques through parallel processing leading to faster encryption and decryption within security implementation exercises
- Ensured proper development of system calls by implementing file management, communication, and information maintenance processes using signal processing techniques to enhance system reliability.
- Improved problem-solving efficiency by 20% through implementing data structures like **lists**, **stacks**, **queues**, and **dictionaries**, enhancing time and space complexity.
- Identified and resolved software bugs using VS Code debugger, valgrind and root cause analysis ensuring software projects were working as required without any malfunction

### LEADERSHIP

- Treasurer Adoptive Technology Engineering Network September 2023-September 2024
- Public Relations Officer OSU App Club September 2022-September 2023
- Association of computing machinery

**Technical Skills and languages:** Python, Java Script, React JS, Tensor, Agile flow, Numpy, Node.JS, HTML, CSS, C, C++, Git, Rest API, Agile, CICD, ReactJS, Linux, Windows

