

MARY NANSIKOMBI

EDUCATION

Oregon State University

Bachelor of Science in Computer Science

Corvallis, OR

GPA 3.72

Honors Roll

Winter

2022-present

Relevant projects

Data structures, Analysis of algorithms, software engineering, Operating systems, Introduction to security, Web development, Statistics for engineers, Innovation management, Innovation and new product development, design thinking and problem solving.

COMPUTER SCIENCE PROJECTS

Operating Systems

- Developed and implemented client server side technologies using network Rest Api's, Node.js, Php for building web applications and efficient communications with servers.
- Executed sub processes through shell scripting, signal processing, multi threading leading to creation of independent small shells through parallel processing to optimize memory utilization
- Developed a spin open close mechanism using semaphores to ensure multi-thread safety within an operating system

Implemented unit ,integration and end to end tests for web applications to ensure proper performance of web applications.

- Utilized GitHub and Git for saving changes, merging code, resolving merge conflicts, transferring software packages, and deploying via GitHub pages using CICD to ensure seamless integration especially when making changes.
- Ensured proper development of system calls through proper implementation of processes, file management, communication and information maintenance using signal processing
- Separated privilege level for kernel and application ensuring application did not have the privilege level to perform operations outside of its scope level
- Utilized Oracle VM virtual box to create isolated virtual environments for writing and running scripts in C via the Ubuntu Linux operating system using the bash command line interface

Technical skills: C, Assembly, Thread usage safety, Mutex locks, Semaphores

WORK EXPERIENCE

Community Assistant

June 2022-to date

Orchard Court Family Housing | Corvallis, OR

- Served as a liaison between different technical and non-technical faculty departments leading to improved collaboration and streamlined apartment processes
- Performed administrative such as data entry when allocating and relocating apartments to students leading to improved efficiency and accuracy in housing assignments.
- Collaborated with a team of six to assist students with after-hours maintenance and emergency issues, improving safety and satisfaction within the student community.

Programming languages and technical skills: C, Java script, Python, Java Script, Bash shell scripting, React.js, Nodejs, Cypress and Jest framework, Continuous integration and continuous deployment, GitHub , Git

Operating systems: Windows(Power Shell Command Line Interface), Linux