# MARY NANSIKOMBI

## **EDUCATION**

Oregon State University Corvallis,

OR Expected Graduation date Dec

2025

**Bachelor of Science in Computer Science** 

**GPA** 

3.72

Minor in Innovation and

Entrepreneurship

Honors Roll Winter

2022-present

#### COMPUTER SCIENCE AND BUSINESS CLASSES

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 AND INTERN PROJECTS

- Implemented software testing techniques through programming using comprehensive unit tests, integral and end to end tests using Jest and the Cypress testing framework, Continuous integration and deployment thus ensuring 70% of robust software quality and seamless delivery.
- Coded and wrote python scripts involving control variable structures, dictionaries, lists and set manipulations.
- 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 in C through shell scripting, signal processing, multi threading leading to creation of independent small shells.

Trained and validated custom data sets using TensorFlow, Pandas, numpy leading to efficient wheat predictions in object detection and image processing leading to accuracy rates of 86% Executed and run multiple models and presented research at the AGAID institute symposium explaining the process of model creation data creation and manipulations.

Utilized skit learn, matplotlib and seaborn for data visualization to show relationships in data such as building confusion matrixes, predictions, and accuracy graphs.

Presented and peer taught other grad students on how to create Deep learning models for similar prediction models.

Utilized the pretrained faster-rcnn model for object detection and predictions.

Generated deep learning models through NumPy, Pandas and TensorFlow for wheat prediction structures present in images

# Web application development

Worked collaboratively with a team of 4 students to develop a web calculator encompassing web stack components.

Demonstrated expert in front end development, improving CSS and JavaScript skills and leveraging tools like Node JS and npm. Implemented dynamic content using handle bars Developed proficiency in database management systems specifically Mongo DB and also in synchronous client server communication for efficient data handling.

Gained experience in developing page components such as navigation bars, headers, photo lists while ensuring code reusability.

Technical skills: Java Script, HTML, MongoDB, Git &Github, Node.js