

Lyle Okoth

Junior Software Engineer

As a self-taught Software Engineer, I Design, Develop, Test, Deploy and Maintain Scalable micro services for web based companies. My key role is to ensure that not only are the services always available and usable by the end user but that they are provisioned with the right cloud infrastructure that strike a good balance between scalability and cost effectiveness.

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WORK EXPERIENCE

Founder, Oryks Robotics

04/2021 – 12/2021

Tasks

- Set the startup mission, vision and execution strategy.
- Source funding.
- Lead the marketing, community outreach and ensure legal compliance.

Robotics Engineer

Oryks Robotics

04/2021 – present

Tasks

- Mechanical design of robot components using solidworks.
- Implementation of ROS navigation and localization stack on agvs.
- Implementation of ROS perception pipeline for pick and place tasks.
- Simulation in solidworks to test for viability of designs.
- Software design and development for agv fleet management using both C++ and Python.
- Do design and product presentations to clients.

Data Scientist

JKUAT-KAPPS

08/2019 – 08/2020

Tasks

- Built a machine learning pipeline to determine whether a plant was infected.
- Built a recommendation engine that informed farmers of what actions to take in case of an infected plant.

EDUCATION

Entrepreneurship

08/2021 – 11/2021

Savvy Fellowship

Mechatronics Engineering

08/2016 – 11/2019

JKUAT

High School Diploma

02/2012 – 11/2015

Friends School kamusinga

ACHIEVEMENTS

i. Winner, JKUAT-KAPS Hackathon 2019

Was part of a team of five university students that developed an android application that enabled farmers scan their crops for diseases then gave them suggestions on what pesticides or insecticides to use in case of an infection. The app also suggested local stores where the farmer could do the purchases.

Lessons learnt

Team work

Pitching startup ideas

Problem solving

TECHNICAL SKILLS

Backend Developer

Designing, Developing, Testing, Deploying and Maintaining scalable microservices using Flask, Django, FastAPI, MongoDB, Postgresql and testing with postman. Turning project requirements into user stories in JIRA.

DevOps Engineer

Provisioning cloud resources for scalable microservices across different cloud providers including Heroku and Digital Ocean. Setting up automated development workflows using git, GitHub Actions and deployment using Docker and Kubernetes as well as costing.

Test Automation Engineer

Assuring code quality by writing automated test suites using pytest and unittest and coverage. Do load testing using locust and behavior testing using beehive and selenium. Write scalable tests using selenium grid.

Robotics

Design robot components using solidworks and control systems using matlab. Model and simulate robots using ROS and developing robots using Arduino and Raspberry Pi in both C++ and Python

Data Analytics and Machine learning

Problem specification, data collection, data preparation, data analysis, data modelling, presentation of findings, model implementation, maintenance and model testing with scikit-learn, numpy, pandas, matplotlib.

Web scraping with scrapy and documentation with sphinx and swagger. Technical writing.

PRESENTATION SKILLS

Microsoft Suite - Excel, Word, Powerpoint
Business presentations

Adobe Suite - Premiere Pro, Indesign, Photoshop
Creating marketing materials, from brochures, publications, videos and social media posts

PROJECTS

E-commerce App

This application enables a shopper to search for items in an online store add the items to a cart and pay for items using MPesa. Also enables a seller to list their items, receive payments and keep track of their inventory.

Code Coverage Indicator

A GitHub action that enables a developer to run code coverage on their code then get a badge indicating their code coverage.

E-commerce Recommendation System

This system recommends products to the shopper based on their search query. The aim is to make product search easier at e-commerce sites.