

LYLE OKOTH

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[LinkedIn](#) • [GitHub](#) • [Medium](#) • [Portfolio](#) • [Leetcode](#) • [Hackerrank](#)

SOFTWARE ENGINEER

A software engineer that designs, develops and deploys web applications that leverage text analytics to improve search and recommendation systems for businesses with a solid grasp of the following software development concepts:

• *Micro services* • *REST* • *JSON* • *CI/CD* • *Test Driven Development* • *Object Oriented Design* • *Technical Writing*
• *Agile Methodologies* • *Containerization* • *Model View Controller Architecture*

TECHNICAL SKILLS

• *Python* • *Flask* • *PostgreSQL* • *Amazon Web Services* • *SQL* • *SQLAlchemy* • *Docker* • *Celery* • *Elasticsearch* • *Terraform* • *Kubernetes* • *Spacy* • *Scikit-learn*

PROFFESIONAL EXPERIENCE

SOFTWARE ENGINEER

Oryks Robotics • 02/2021 - 02/2022

A startup aiming to automate warehouse logistics for e-commerce operators.

Responsibilities | Tasks

- Built software for reading sensor data from LIDAR's, cameras and wheel encoders using Raspberry Pi's and Arduino based microcontrollers.
- Developed perception and navigation algorithms using the Robot Operating System (ROS) for indoor navigation.
- Provided and managed ECS and EK8 clusters on Amazon Web Services.
- Created and maintained CI/CD pipelines using GitHub, GitHub Actions and Amazon Code pipeline.

Achievements

- Reduced software deployment time by 90% by containerizing the software and using GitHub actions for building and deploying updates.

PROFESSIONAL EDUCATION

B.Sc. in Mechatronics Engineering • 2016 –2019

Jommo Kenyatta University of Agriculture and Technology • Nairobi, Kenya

Member • Society of Engineering Students (SES)

Relevant coursework: • C, C++ Programming • Solidworks

COURSEWORK | CERTIFICATIONS

- ALX Africa • Software Engineering Boot camp • 07/2022 - 08/2023

PERSONAL PROJECTS

Search Service | [Flask](#) • [AWS](#) • [Celery](#) • [Docker](#) • [Elasticsearch](#) • [Terraform](#) | [GitHub](#) | [Deployed Application](#)

- A web application consisting of two micro services: a blog service for registration of authors and the creation of articles and a search service for finding articles.
- Uses Elasticsearch to power the search functionality, PostgreSQL and AWS S3 for storage and celery with Redis for image upload.
- Microservices are containerized and deployed to AWS ECS using terraform and GitHub actions.