Osodo Rodney David

rodneyosodo.com | me@rodneyosodo.com | linkedin.com/in/rodneyosodo | github.com/0x6f736f646f

I am a technology enthusiast, with a burning interest in the electronics industry. I have a newfound love for sustainable energy triggered by my intuition to make our future better. I am currently pursuing my dream in Mechatronics Engineering with the hope of becoming a better doctoral researcher particularly in Kenya where the field is currently not robust. I am currently working on the design and fabrication of a prototype mobile platform with holonomic and omnidirectional motion and have previously developed the ujuzi device to monitor your energy consumption.

Technical Skills

Languages: Go, Rust, Python, C/C++, SQL (Postgres), Matlab
Softwares: Matlab, Proteus, Autodesk Fusion, Easy EDA, KiCAD
Developer Tools: Git, Docker, Google Cloud Platform, PyCharm
Technologies: Renewable Energy, Ebikes, Embedded Systems, Artificial Intelligence

Education

IBM Summer School Online
Quantum Computing, Minor in Machine Learning *Sep. 2020 and Sep 2021*

Jomo Kenyatta University of Agriculture and Technology Nairobi, KE
Bachelor of Science in Mechatronics Engineering *Sep. 2017 – Dec 2022*

- Designed wearable device that helps the visually challenged people to accomplish their day to day task
- Designing and fabricating a prototype mobile platform with holonomic and omnidirectional motion

Experience

Engineer July 2019 – Present
Juja, Nairobi *Qualislabs, KE*

- I worked with hardware and firmware engineers to build our API responsible for image processing.
- Developed the PCBs for Ujuzi devices
- Developed and maintained Mavuno application

Rocket Scientist Intern Feb 2021 – May 2021 and Jan 2022 – May 2022
Jomo Kenyatta University of Agriculture and Technology *Nakuja Project, KE*

- I was able to do a comprehensive design of the rocket sub-system, Avionics.
- Implemented Kalman filter using sensor fusion to detect apogee.
- I was able to participate in the Sustainable Research conference and submitted a technical paper

Projects

Open source Contributor @ Mainflux | *Golang, Go-Kit, Docker* January 2020 – Present

- Intergrated mainflux to IoT devices vendors
- Built Python SDK

Ujuzi Device | *Docker, Easy EDA, Smart devices* October 2020 – Present

- Developed the PCB of Ujuzi device
- Tested ujuzi device with Apple HomeKit and Google Home

Mavuno application | *Python, Go, Kubernetes* November 2020 – January 2021

- Developed and maintained the backend website application
- Developed predictive model to match food donors to consumers
- Submitted the project to IBM Call for Code 2021

Technical Experience

- Submitted a paper to the SRI conference held at JKUAT
- Won the JKUAT Tech Expo 10.0
- Got called to the IBM Quantum Africa Hackathon
- Got accepted to the Quantum Open Source Foundation program
- Regional Finalist at the IBM Call for Code Challenge