Osodo Rodney David

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

I am a highly skilled mechatronics engineer with a passion to design and create innovative systems and devices. With a strong background in both theory and practical application, I have a unique skill set that allows me to approach problem-solving from multiple angles and find creative solutions to complex challenges. Throughout my career, I have worked on a wide range of projects, including the development of intelligent machines, the design and implementation of control systems, and the integration of electromechanical systems. In addition to my technical skills, I am a strong team player with excellent communication and problem-solving abilities.

TECHNICAL SKILLS

Languages: Assembly, Go, Rust, Python, C/C++, SQL, Matlab
Design Tools: Autodesk Inventor, Autodesk CFD, Proteus, EasyEDA, KiCAD, Atmel Studio
Technologies: CNC Machining, Milling, Welding, 3D printing, PCB Etching, Embedded Systems, Artificial Intelligence

EDUCATION

Jomo Kenyatta University of Agriculture and Technology　　　　　Sep. 2017 – Dec 2022
Bachelor of Science in Mechatronics Engineering　　　　　　　　　　　*Nairobi, KE*
- Designed and fabricated a prototype mobile platform with holonomic and omnidirectional motion.
- Designed wearable device that helps the visually challenged people to accomplish their day to day task.

EXPERIENCE

Software Engineer　　　　　　　　　　　　　　　　　　　　Jan 2022 – Present
Remote, Nairobi　　　　　　　　　　　　　　　　　　　　　*Ultraviolet, Serbia*
- Build, tested, documented and maintained Go backend micro-services.
- Intergrated a multi-broker, Nats, RabbitMQ or Kafka setup for the internal message broker.

Software Engineer　　　　　　　　　　　　　　　　　　　　Jul 2019 – Present
Juja, Nairobi　　　　　　　　　　　　　　　　　　　　　　*Qualislabs, KE*
- Worked with hardware and firmware engineers to build our API responsible for image processing.
- Build and maintained a Kubernetes cluster to handle all our API calls.

Rocket Scientist Intern　　　　　　　Feb 2021 – May 2021 & Jan 2022 - Apr 2022
Jomo Kenyatta University of Agriculture and Technology　　　　　　*Nakuja Project, KE*
- I was able to do a comprehensive design of the Avionics and Airframe rocket sub-systems.
- Implemented Kalman filter using sensor fusion to detect apogee.
- I was able to participate in the SRI conference and submitted a technical paper.

Mechanical Engineer Intern　　　　　　　　　　　　　　　　Sep 2019 – Oct 2019
Rift Valley Machineries Service, Nairobi　　　　　　　　　　　　*Industrial Area, KE*
- Installation, servicing and maintaining of generators, pump , posho mill assembly, farm machinery assembly and operation of construction machinery.

PROJECTS

Design and fabrication of a holonomic and omnidirectional mobile platform　　May 2022 – Dec 2022
- Mechanical chassis and platform design.
- Independent control of motor rotational and translational motion.

Design of a Manual Shearing Machine | *Autodesk Inventor, Autodesk FEA*　　Jun 2021 – Aug 2021
- Carried out a Finite element analysis to determine maximum load.

Fabricated a Spool valve | *Autodesk Inventor, Lathe Machine*　　Jan 2019 – Mar 2019
- Machined the spool valve using facing, turning, parting, threading and drilling.

TECHNICAL EXPERIENCE

- **Submitted a paper to the SRI conference held at JKUAT.**
- **Won the JKUAT Tech Expo 10.0.**
- **Regional Finalist at the IBM Call for Code Challenge.**
- **Got called to the IBM Quantum Africa Hackathon.**