Osodo Rodney David

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I am a highly skilled quantum engineer with a passion for advancing the field of quantum computing and its practical applications. With a strong background in both theory and practical implementation, I have a unique skill set that allows me to approach problem-solving from multiple angles and find creative solutions to complex challenges. In addition to my technical skills, I am a strong team player with excellent communication and problem-solving abilities.

Technical Skills

Languages: Go, Rust, Python, C/C++, SQL (Postgres), Dart, HTML/CSS
Frameworks: Qiskit, Cirq, Django, Tensorflow, Sklearn, Numpy
Developer Tools: Git, Docker, Kubernetes, TravisCI, Google Cloud Platform, Testing, Swagger

Education

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

- Designed and implemented a variational quantum eigensolver (VQE) algorithm that simulates the ground state energy of the Lithium Hydride molecule.

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.
- Design, developed, deployed a secure, robust, scalable authorization platform for the infrastructure.

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.
- Designing and implementing gRPC and Pub/Sub APIs.

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.

Projects

Variational Quantum Classifier | *Python, Jupyter, Machine Learning, Quantum* Nov 2020 – Jan 2021

- Developed a Quantum Machine Learning Classifier.
- Carried out data exploration and cleaning of Heart attack data.
- Generalised the model with wine and iris datasets.

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.