

OKIROR SAMUEL VINALD

COMPUTER ENGINEER

🌐 Portfolio 📞 +256 746178844 📩 okiror1vinald@gmail.com 💬 Vinald 💬 Okiror Samuel Vinald

SUMMARY

Results-driven **Software Developer** with a **Bachelor of Science in Computer Engineering**, specializing in full-stack web and mobile development. Proficient in JavaScript (React, React Native), Python (Django), and Java, with hands-on experience building scalable, user-centric applications. Combines strong theoretical foundations with practical problem-solving to deliver efficient, maintainable code. Passionate about bridging system design and seamless UX, with a keen interest in Full Stack Development, AI/ML integration, and cybersecurity best practices. Eager to contribute to dynamic software development teams and learn from seasoned mentors while building real-world applications in a fast-paced environment.

TECHNICAL SKILLS

Programming Languages: Java, Kotlin, Python, JavaScript, TypeScript, SQL

Frontend: Reactjs, Nextjs, , Bootstrap, Tailwind CSS, UI/UX

Backend: Django, Node.js, SpringBoot, Expressjs, FastAPI

Mobile App Development: Kotlin, React Native

Databases: MySQL, PostgreSQL, MongoDB

ML & AI: TF, Scikit-learn, Data Analysis, LLM, Gen AI

Tools: Git, GitHub, Docker, Linux, Figma, Microsoft Office Suite, Adobe (*Illustrator, Photoshop*)

EMPLOYMENT HISTORY

Software Developer, Infectious Disease Institute (IDI)

January 2025 — Present

- ✓ Set up tablets, created facility credentials, and configured local development servers for VXNAID.
- ✓ Debugged and tested frontend and backend code, including , offline mode, and data syncing issues.
- ✓ Developed automated fixes, pull requests, and code flow adjustments for VXNAID system.
- ✓ Analyzed logs, resolved caching issues, and ensured data integrity across reports.
- ✓ Produced manuals, training materials, and SOPs for remote configuration and tablet deployment.
- ✓ Participated in deployment and training of health center personnel on VXNAID across facilities.
- ✓ Gained Skills: Kotlin, Android Development, Agile Workflow, OpenMRS, Jira, Trello, Git, Linux, Linux servers.

Sortware Developer Intern, Zidio

August 2024 — Oct 2024

- ✓ Analyzed project data and created summaries to support decision-making.
- ✓ Cleaned and transformed data, ensuring high-quality datasets.
- ✓ Developed backend services with JavaScript, optimizing server performance and scalability.
- ✓ Designed APIs and ensured secure integration of databases.
- ✓ Gained Skills: Python, JavaScript, SQL, Excel, API Design, Data Analysis.

Software Developer Intern, NetLabs!UG

June 2023 — Sept 2023

- ✓ Learned Python and foundational machine learning concepts.
- ✓ Designed a smart irrigation management system using Python and TensorFlow to optimize irrigation

patterns.

- ✓ Integrated sensor data into an embedded system for real-time decision-making.
- ✓ Acquired practical experience in embedded systems, networking, Python, and machine learning.

Software Intern, EvoTech Solutions

June 2022 — Sept 2022

- ✓ Developed user interface components for a school management system using React, enhancing usability and visual appeal.
- ✓ Implemented interactive features that improved user experience and functionality.
- ✓ Strengthened skills in front-end technologies: HTML, CSS, JavaScript.

EDUCATION

Bachelor of Science in Computer Engineering

Makerere University, Kampala, Uganda

Uganda Advanced Certificate of Education

St. Peter's College, Tororo

Uganda Certificate of Education

St. Peter's College, Tororo

SOFT SKILLS

Problem-Solving Adaptability Communication Teamwork Time Management Quick Learner

PROJECTS

VXNAID System — Vaccine and Immunization Management Kotlin, Android, OpenMRS

Developed and debugged frontend and backend workflows including child registration, return visit flows, offline sync, and visit type consistency. Set up local development servers, staging servers, and tablets. Improved system usability, mobile interface, and reporting features for administrators and operators. Deployed and trained health workers across multiple facilities.

Smart Irrigation System

Python, TensorFlow, Flask

Developed a smart system integrating machine learning to optimize water usage based on real-time sensor data, reducing water consumption by 30%.

Voice-Controlled Wheelchair

Python, Embedded Systems, TensorFlow

Engineered a voice-activated wheelchair system using speech recognition, enabling hands-free control for users with physical impairments significantly improving accessibility.

REFERENCES

Names, Contacts and Emails available on request