
David Muchoki Ndungu

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Professional Summary

Knowledgeable and skilled software development professional offering advanced abilities in wide range of programming languages, including Kotlin, Typescript, C++, TailwindCSS, Python NoSQL and SQL Language. Quickly understands requirements for new systems, contributes to robust solutions, and is familiar with testing, debugging, and correcting issues in existing software systems.

Work Experience

IOS And Android Developer, 09/2025 to present

Graffins Dawa

- Developed and deployed a scalable backend on Microsoft Azure, leveraging Express.js, TypeScript, and PostgreSQL to deliver high-performance and secure API services.
- Contributed to a Kotlin Multiplatform Mobile (KMM) application, building modern, responsive interfaces using Jetpack Compose Multiplatform, and implementing SQL Delight-based local caching, offline-first capabilities, and automatic background data synchronization to improve reliability and user experience
- Collaborated with cross-functional teams to improve application reliability, optimize API response times, and ensure smooth integration between the frontend and mobile clients.

Assistant Software Developer, 05/2024 to 09/2024

Centre For International Programs (ICAP)

Company Overview: ICAP is a global health organization affiliated with Colombia University, Dedicated to improving the health of families and communities worldwide

- Contributed to the development of SHIELD (Surveillance Health Information Exchange and Linkage Data) backend (API) using Elixir, PostgreSQL database,
<https://shield.health.go.ke/home>
- Built and launched the official website for Icap Kenya, enhancing its digital presence
<Https://icapkenya.org/>

- Conducted data entry for Event-Based Surveillance (EBS) using REDCap, ensuring accurate and efficient data handling
- Created a SHIELD demo using JavaScript, Nodejs, Ejs (Embedded JavaScript templates), NEONDB-PostgreSQL database, HTML5, Tailwind CSS ensuring a responsive and userfriendly design and secure-<https://shield-demo.onrender.com>
- Created a forum API that allows a user to be able to post a blog, be able to sign in and get authenticated, has a bar chart which displays information
- Built a helpdesk API allowing facility user to post an issue and is given a unique id and the data is saved in PostgreSQL database

Software Developer Intern, 10/2023 to 04/2024

Centre For International Programs (ICAP)

- Conducted data entry of antimicrobial usage by patients in hospital using Redcap
- Utilized Python programming language, Panda's python library, and MySQL database for data analysis tasks
- Developed a health software demo using PHP, HTML, JavaScript, CSS, and MySQLdatabase
- Website hosting using Oracle VM and NGINX on Ubuntu Operating System
- Created data API demo (Application Programming Interfaces) containing customers and invoices
- Documented Informatics department meetings including Surveillance and Health Information Exchange and Linkage of Data (S.H.I.E.L.D) meeting and A.D.A.M(All Disease Outbreak Module) meeting
- Used docker for containerization, streamlining the deployment process and ensuring consistent environments across development, testing and production

Attachment Student (Under the ICT department), 07/2023 to 09/2023

Kenyatta University Teaching Referral and Research Hospital (KUTRRH)

Company Overview: It is a National Referral Hospital with a 650-bed capacity

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- Conducted networking tasks such as crimping ethernet cables from servers to endpoints
- Completed data entry tasks using Excel and REDCAP for tracking antimicrobial usage, diseases, and cultures
- Provided maintenance and support of hardware and software systems
- Network administration and troubleshooting
- Assisted in web development using WordPress, including customization of website pages

Education

Diploma: Computer Science, September 2020-November 2023 ZETECH UNIVERSITY

Certificate: AI in Software Engineering, June 2025-December 2025
Power Learn Project

Kenya Certificate of Secondary Education: 2020
Molo Academy

Kenya Certificate of Primary Education: 2016
Bahati UpperHill Academy

Skills

- **Programming Languages:** C++, Kotlin, Typescript, JavaScript, Elixir, Python , HTML5, CSS, Tailwind CSS
- **Frameworks and Libraries:** Crow, Nextjs, Kotlin Multiplatform, Express.js, EJS, Ash framework, Phoenix framework, Flask
- **Database Management:** PostgreSQL, Appwrite, Cloud Firestore, MongoDB
- **Tools and Platforms:** Docker, NGINX, Oracle VM, Render, Git, Firebase, Neon DB, Appwrite, Vercel, Firebase Messaging, Stripe and Mpesa Integrations, Google Cloud Platform, Langchain JS, DataStax
- **Content Management Systems:** WordPress
- **Testing and Monitoring:** Jest- React Testing Library, Prometheus
- **Development Skills:** Mobile development, AI Development, API development (RestFul and WebSocket API), Web development and design, and server management

Certifications

Certificate of service
CCNA certificates

Website, Portfolio And Profiles

<https://github.com/muchoki769> <https://portfolio-three-mu-22.vercel.app/>

References

- Eric Ejimba, Data Engineer ICAP, ejimba@gmail.com, +254 725966650
- Brian Kariuki, Software Developer at ICAP, bk2936@cumc.colombia.edu, +254 729948411
- Doris Naitore, Country Representative at ICAP, dno2104@cumc.columbia.edu