Muturi David

muturidavid854@gmail.com | linkedin.com/in/tushdev | github.com/tushcmd | tushdev.co

Experience

Software Engineering Intern Aug. 2025 – Present
COSEKE Kenya Limited *Nairobi, Kenya*

- Building and maintaining React-based SaaS dashboards for enterprise document management solutions.
- Collaborating with designers and backend engineers to create responsive, accessible, and high-performance web interfaces.
- Integrating RESTful APIs, optimizing performance, and implementing scalable component-based architectures.

Software Engineering Fellow & Resident Jul. 2024 – Mar. 2025
Headstarter Accelerator *Remote*

- Developed and deployed AI-powered and full-stack applications including a churn prediction model, image generation tool, and SaaS learning platform.
- Worked with React, Next.js, Firebase, OpenAI API, and AWS to build scalable web apps with CI/CD workflows.
- Collaborated in agile teams, contributing to design, testing, and deployment of production-grade solutions.

Projects

Flashcards SaaS
Next.js, Clerk, Firebase, OpenAI, Stripe

- Launched successful SaaS platform gaining nearly 50 active users within the first week of launch through GPT-4 powered flashcard generation
- Implemented subscription-based access control and real-time CRUD operations with Firebase Firestore and Stripe payment processing

AI Customer Support Chat Bot
Next.js, Shadcn UI, Next-auth, Prisma, PostgreSQL, Neon, OpenAI, TailwindCSS

- Developed an AI-powered customer support chatbot with a responsive interface, authentication, and feedback features using Next.js and the OpenAI API
- Built scalable backend with PostgreSQL and Prisma, handling multiple concurrent user sessions with 99.9% uptime

Credit Card Fraud Detection
Python, Machine Learning, Sparkov Dataset

- Developed a machine learning model to detect fraudulent credit card transactions using a simulated dataset of 1,000 customers and 800 merchants from 2019-2020
- Addressed dataset challenges including class imbalance and feature selection using advanced preprocessing techniques
- Utilized LLM capabilities to provide interpretable insights and explanations for model predictions

Brain Tumor Classification
Python, Neural Networks, Computer Vision

- Used neural networks in Python to classify 1,000 MRI scans into 3 types of brain diseases with a custom-trained model
- Generated multimodal MRI reports for neurosurgeons in under 200ms post-image classification

Hackathons

Rilla Voice
React, TypeScript, Node.js, AWS Lambda, DynamoDB, S3

- Finalist in a hackathon with a team of 5. Led frontend development using React with TypeScript for viewing transcripts, managing comments, and displaying summaries. Implemented a backend with Node.js and AWS Lambda for handling CRUD operations and integrating with an LLM to generate summaries

Education

Kenyatta University Nairobi, Kenya
Bachelor of Science *Jan. 2023*

Technical Skills

Languages: Intermediate: JavaScript (3 yrs), Python (3 yrs) TypeScript (2 yrs), Beginner: SQL (1 yr)
Frontend: React.js, Next.js, React Native, TailwindCSS, Material UI
Backend: Node.js, Express.js, MongoDB, PostgreSQL, Prisma, Firebase
ML: Pandas, Seaborn, Keras, Scikit-learn
Software / Tools: Bash, Git, GitHub, Figma, Docker
Concepts: Object-Oriented Programming, RESTful APIs, UI/UX Design Principles