Samson Kinyanjui

https://sammainah.com

https://github.com/sammainahkinya1404

SKILLS

• Languages: Java, Python, JavaScript, SQL

• Frameworks & Libraries: Express, NextJs, Node.js, Flask, TensorFlow, PyTorch, Scikit-learn

• Databases: MySQL, MongoDB

• DevOps & Cloud: Docker, GitHub Actions, AWS (EC2, S3, Lambda), Google Colab, Paperspaces

• Machine Learning: Feature engineering, hyperparameter tuning, model deployment

• Version Control & Tools: Git, Linux

• Soft Skills: Problem-Solving, Communication, Analytical Thinking, Adaptability, Leadership, Presentation

EDUCATION

• Dedan Kimathi University of Technology

Master of Science in Computer Science

Nyeri, Kenya Oct. 2023 – Present

• Dedan Kimathi University of Technology
Bachelor of Science in Information Technology

Nyeri, Kenya *May 2019 – Apr. 2023*

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EXPERIENCE

• Freelance Machine Learning & Full Stack Developer

Online, Remote

Jan 2022 - Present

- Machine Learning: Preprocessed datasets, built pipelines, trained and fine-tuned models for production.
- Full Stack Development: Designed and deployed responsive React/Django/Flask apps.
- API Engineering: Developed RESTful and GraphQL APIs for client-server data exchange.
- Cloud Deployment: Managed container-based deployment using Docker and AWS EC2/S3.
- Data Analytics: Performed data wrangling and exploratory analysis for client use cases.
- Agile Practices: Delivered work in iterations with feedback loops from clients.

• Graduate Research Assistant

Dedan Kimathi University of Technology, Nyeri, Kenya Oct 2023 - Present

- Student Labs: Guided students through ML labs, assignments, and practical sessions.
- Deep Learning Projects: Assisted students in CNN/RNN/Transformer-based implementations.
- Data Preprocessing: Taught data cleaning, augmentation, and feature engineering.
- Optimization Techniques: Reviewed student models and improved performance via tuning.
- Presentation & Teaching: Explained concepts to technical and non-technical audiences.

Projects

- Kenyan Business Ideas & Investment Bot: Built an ML-powered chatbot with React frontend and Flask backend, fine-tuned for Kenyan economic data. View Project
- Research Article Generator (RAG) App: Enhanced app to summarize and search scientific research articles using transformers. GitHub
- Campus Part-time Jobs: Developed a Django-based web app for connecting students to campus jobs like academic theses. View Project
- CORD-19 Topic Clustering: Performed unsupervised clustering of COVID-19 research articles using LDA + K-means NLP pipeline. GitHub

Publications

• Financial Health Assessment for Households in Kenya: Kinyanjui, Samson, et al. "Financial Health Assessment for Households in Kenya." In 2024 International Conference on Information and Communication Technology for Development for Africa (ICT4DA), pp. 90-95. IEEE, 2024.