

MARTIN NJOROGE

Junior AI Trainer & Freelance Software Engineering Consultant

SUMMARY

Software Engineer with hands-on experience in AI training and software development. Proficient in Python, Java, C++, JavaScript, PHP, and MySQL. Skilled with TensorFlow, Scikit-Learn, and PyTorch. Master's and Bachelor's degrees in Software Engineering and Intelligent Systems from Kirinyaga University. Developed an AI-augmented code optimization framework and an academic performance predictor using ML techniques. Strong background in full-stack system development, machine learning model evaluation, dataset annotation, and software engineering research.

TECHNICAL SKILLS

Main Technical Skills	Python, Java, JavaScript, C/C++/C#, PHP
Programming Languages	Java, JavaScript, PHP, Python
Ruby Libraries and Tools	Active model serializer
C++ Libraries and Tools	C/C++/C#
AI & Machine Learning	Neural Networks, NLP, PyTorch, Scikit-learn, TensorFlow
Python Libraries and Tools	PyTorch, Scikit-learn, TensorFlow
Data Analysis and Visualization Technologies	Data Analysis
Databases & Management Systems / ORM	Data Lake, MySQL
UI Frameworks, Libraries, and Browsers	HTML/CSS Preprocessors
Methodologies, Paradigms and Patterns	Architecture and Design Patterns
Virtualization, Containers and Orchestration	Docker
Version Control	Git
Operating Systems	Linux
Third Party Tools / IDEs / SDK / Services	Microsoft Visual Studio Code

**BlockChain and
Decentralized Software**

Optimism



WORK EXPERIENCE

Researcher - Master's Thesis, AI-Augmented Code Optimization and Predictive Debugging Framework

Duration: August 2023 – On-going

Summary: Developed an AI-Augmented Code Optimization and Predictive Debugging Framework exploring the use of large language models to analyze, detect, and correct code issues.

Responsibilities: Dataset refinement, annotation, error analysis, and algorithmic research.

Technologies: Large Language Models, Python, AI/ML Tools

Research Assistant, AI & Innovation Research Group Collaboration

Duration: Date Not Specified

Summary: Contributed to Python-based tool creation, dataset curation, and evaluation of experimental AI models with the university's AI & Innovation Research Group.

Responsibilities: Tool creation, dataset curation, experimental AI model evaluation.

Technologies: Python, AI/ML Tools

Student - Final-Year Project, AI-Based Academic Performance Predictor

Duration: Date Not Specified

Summary: Created an AI-Based Academic Performance Predictor using machine learning techniques to forecast student performance.

Responsibilities: Applied AI and model evaluation.

Technologies: Machine Learning, Supervised Learning, Python

AI Trainer & Freelance Software Engineering Consultant, AI Training & Software Consulting

Duration: 2023 to Present

Summary: AI model training, refinement, and evaluation, and development of Python-based tools for automation and model diagnostics.

Responsibilities: Train, refine, and evaluate AI models through structured dataset creation and annotation. Develop automation tools and evaluate AI outputs.

Technologies: Python, AI/ML Tools, Dataset Creation, NLP

Software Development Intern, University Systems Development



DURATION: JANUARY 2022 - DECEMBER 2022

SUMMARY: ASSISTED IN THE DEVELOPMENT, TESTING, AND MAINTENANCE OF INTERNAL SYSTEMS FOR KIRINYAGA UNIVERSITY WITH A FOCUS ON WEB SOLUTIONS.

RESPONSIBILITIES: DEVELOPMENT, TESTING, MAINTENANCE OF SYSTEMS, PERFORMANCE IMPROVEMENT, AND CONTRIBUTION TO ADMINISTRATIVE EFFICIENCY.

TECHNOLOGIES: PHP, JAVASCRIPT, HTML/CSS, MYSQL
EDUCATION

- **Master of Science in Intelligent Systems & Software Engineering**

This Master's program exposed me to advanced concepts in Machine Learning, Intelligent Algorithms, Deep Learning, Software Architecture, and Human-AI Interaction.

August 2023 – July 2025

- **Bachelor of Science in Software Engineering**

My Bachelor's Degree established a strong technical foundation in programming, system design, databases, and computational thinking.

September 2020 – July 2023

