MARTIN NJOROGE
Junior Software Engineer and AI Training Specialist

SUMMARY

Proven Software Engineer with robust academia in Intelligent Systems & Software Engineering, adept in Python, Java, and AI/ML technologies. Offers hands-on experience in AI model training and software development, with expertise in algorithm optimization and system design. Noteworthy involvement in developing an AI-augmented code optimization framework and a performance predictor project during BSc. Combines technical prowess with data annotation and model evaluation finesse, poised to thrive in AI innovation.

TECHNICAL SKILLS

Main Technical Skills	Python, Java, JavaScript, C/C++/C#, PHP
Programming Languages	Java, JavaScript, PHP, Python
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
.NET Platform	WPF
Databases & Management Systems / ORM	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
Platforms	LCDP
Operating Systems	Linux, Unix
Third Party Tools / IDEs / SDK / Services	Microsoft Visual Studio Code
Other Technical Skills	Data Structures, Tools

WORK EXPERIENCE

Bachelor of Science Student, AI-Based Academic Performance Predictor

Duration: Final-Year Project, 2020–2023
Summary: AI-Based Academic Performance Predictor using machine learning techniques to forecast student performance.
Responsibilities: Utilized supervised learning algorithms for model training and evaluation, reinforcing early interest in applied AI.
Technologies: Python, Machine Learning Techniques

Software Development Intern, Software Development Internship

Duration: January 2022 – December 2022
Summary: Development, testing, and maintenance of systems for internal university operations as part of ICT department.
Responsibilities: Assisted in building responsive web solutions, debugging, documenting, and optimizing existing systems for performance improvement, contributed to automation tools for administrative efficiency.
Technologies: PHP, JavaScript, HTML/CSS, MySQL

Master of Science Student, AI-Augmented Code Optimization and Predictive Debugging Framework

Duration: Master's Thesis, 2023–2025
Summary: AI-Augmented Code Optimization and Predictive Debugging Framework exploring how large language models can assist software engineers.
Responsibilities: Developed competency in dataset refinement, annotation, error analysis, and algorithmic research for predictive debugging.
Technologies: Python, Machine Learning, Large Language Models

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

Duration: 2023 to Present
Summary: Freelancing in AI model training, refinement, and evaluation involving structured dataset creation and annotation.
Responsibilities: Train and refine AI models, develop Python-based tools for automation, dataset cleaning, evaluate AI outputs for accuracy, collaborate with R&D teams for AI prototype testing.
Technologies: Python, TensorFlow, Scikit-Learn, PyTorch, NLP techniques

EDUCATION

- **Master of Science in Intelligent Systems & Software Engineering**
  Exposure to advanced concepts in Machine Learning, Intelligent Algorithms, Deep Learning, Software Architecture, and Human–AI Interaction. Contributed to AI & Innovation Research Group for Python-based tool creation, dataset curation, and evaluation of experimental AI models. Master's thesis on 'AI-Augmented Code Optimization and Predictive Debugging Framework for Software Engineers'.
  August 2023 – July 2025
- **Bachelor of Science in Software Engineering**
  Established a strong technical foundation in programming, system design, databases, and computational thinking. Gained proficiency in various programming languages and developed 'AI-Based Academic Performance Predictor Using Machine Learning

Techniques' as a Final-Year Project.
September 2020 – July 2023