

# 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

<b>Main Technical Skills</b>	Python, Java, JavaScript, C/C++/C#, PHP
<b>Programming Languages</b>	Java, JavaScript, PHP, Python
<b>C++ Libraries and Tools</b>	C/C++/C#
<b>AI &amp; Machine Learning</b>	Neural Networks, NLP, PyTorch, Scikit-learn, TensorFlow
<b>Python Libraries and Tools</b>	PyTorch, Scikit-learn, TensorFlow
<b>.NET Platform</b>	WPF
<b>Databases &amp; Management Systems / ORM</b>	MySQL
<b>UI Frameworks, Libraries, and Browsers</b>	HTML/CSS Preprocessors
<b>Methodologies, Paradigms and Patterns</b>	Architecture and Design Patterns
<b>Virtualization, Containers and Orchestration</b>	Docker
<b>Version Control</b>	Git
<b>Platforms</b>	LCDP
<b>Operating Systems</b>	Linux, Unix
<b>Third Party Tools / IDEs / SDK / Services</b>	Microsoft Visual Studio Code
<b>Other Technical Skills</b>	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

