

Sammy Kiptoo

Resume

Computer Networks and Distributed Systems

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SUMMARY

Computer Science undergraduate with a strong foundation in computer networks, distributed systems, and artificial intelligence. Gained practical experience through an industrial attachment in a large-scale telecommunications managed services environment, supporting network operations, monitoring, troubleshooting, and field activities across enterprise-scale infrastructure. Analytical, adaptable, and eager to learn new technologies, with the ability to collaborate effectively in multidisciplinary teams. Seeking an internship where I can apply my technical skills while contributing to reliable, innovative technology solutions.

WORK EXPERIENCE

Nokia Managed Services - Industrial Attachment / Intern, Nairobi, Kenya

September 2025 - December 2025

Network Operations Center (NOC)

- Monitored network KPIs and SLAs and supported response to critical alarms across 2G, 3G, 4G, and 5G networks.
- Liaised with Field Operations Engineers (FOEs) during fault resolution and performed Level 1 troubleshooting across BSS, transmission, and core network domains.

Systems and Network Management Tools

- Gained hands-on exposure to Nokia NetAct, Ericsson Network Manager, Nokia NFMP, Huawei iMaster NCE, ZTE NetNumen, Elastic Net, and ITSM platforms.

Field Operations

- Participated in preventive maintenance, site upgrades, replacement of faulty SFP modules, and support of Network Planning and Optimization (NPO) activities.
- Visited twelve operational sites, including a data center, hub site, and Indoor Building Solutions (IBS) site.

Base Station Subsystem (BSS)

- Used Ericsson network management CLIs and completed simulation tasks such as configuring X2 interfaces in 4G using Ericsson Moshell.

Network Planning and Optimization (NPO)

- Assisted in resolving customer complaints and KPI degradation by remotely preparing re-azimuth and tilt adjustment plans for execution by FOEs, alongside supporting power boosting and drive test activities.
- Utilized tools including Google Earth, Microsoft Excel, G-Net Tracker and QualiPoc.

Core Network

- Gained exposure to circuit-switched core, packet core, IMS core, and the Mobile Packet Backbone Network (MPBN) interconnecting the core network.

EDUCATION

Bachelor of Science in Computer Science, Kabarak University, Nakuru

Expected Completion, August 2026

Expected Graduation, December 2026

Relevant Coursework: Computer Networks, Internetworking with TCP/IP, Distributed Systems, Artificial Intelligence, Database Management Systems, Operating Systems, Network Security and Cryptography

PROJECTS

Weather Planner for Field Technicians — AI Coursework Project (2026)

AI-based decision-support system

- Led a team of five in building a weather-aware scheduling tool that optimized repair and maintenance windows based on forecasted weather risk.
- Integrated the Open-Meteo API for live and forecast data; applied machine learning classification to quantify weather risk and search-based techniques to schedule jobs around high-risk periods.
- Built and deployed a public dashboard interface using Streamlit to communicate risk and scheduling data clearly to end users.

Live demo: weather-planner-for-field-technicians.streamlit.app

Note: the application may take a few seconds to load if it has been inactive.

Web-Based Construction Inventory Management System — Final-Year Project

- Scoped requirements and built a full-stack web application to track construction inventory end-to-end, including database design for accurate, up-to-date record keeping.

SKILLS

Python, Microsoft Excel, Web Development, Network Troubleshooting, Network Configuration, TCP/IP

CERTIFICATIONS

- Open Source and the 5G Transition - The Linux Foundation
- [View-Certificate](#)
- ESG and Climate Change - Coursera
- [View-Certificate](#)
- Professional Writing - Saylor Academy
- [View-Certificate](#)
- Defensive Driving - Life Safety Training Center
- [View-Certificate](#)

REFERENCES

Available upon request