

Collins Kiptoo

Nairobi, Kenya • collinskandie1@gmail.com • GitHub: <https://github.com/collinskandie> • LinkedIn <https://www.linkedin.com/in/collins-kiptoo-0929b81aa/>

Professional Summary

Innovative Software Engineer with over 4 years of experience developing scalable systems in healthcare, ERP, and supply chain domains. Experienced in full-stack (MERN, Java, Python), distributed systems, and cloud-native designs. Currently pursuing a Master's degree in artificial intelligence, with a focus on machine learning, deep learning, and natural language processing. A proven track record of decreasing system inefficiencies, optimising workflows, and providing enterprise-grade software. I'm passionate about AI systems, open-source contributions, and developing dependable large-scale applications.

Professional Experience

ICT Officer (Software Engineer) | Moi Teaching and Referral Hospital | Eldoret, Kenya

June 2025 - Present

- Enhanced the Laboratory Information Management System (LIMS), reducing lab reporting turnaround time by **30%**.
- Customized and deployed ERP modules (finance, HR, inventory) serving **5,000+ hospital staff**, streamlining hospital-wide operations.
- Improved system uptime and data reliability, cutting downtime-related disruptions by **~25%**.
- Collaborated with clinicians and administrators to ensure successful ERP adoption, including staff training and post-deployment support.

Senior Software Engineer | Renga Tech | Nairobi, Kenya

January 2025 – July 2025

- Architected **Solichain**, a blockchain-enabled traceability platform adopted in agriculture and logistics, improving accountability across multi-party networks.
- Led development of **Renga ERP** (CRM, timesheets, project management) — boosted client productivity and reduced manual reporting by **40%**.
- Built Monitoring, Evaluation & Learning (MEL) software used across multiple projects, improving data accuracy and reporting compliance.
- Mentored junior developers, established structured code review processes, and enforced engineering best practices — reducing bugs in production by **~35%**.

Full Stack Software Engineer | Renga Tech | Nairobi, Kenya

June 2023 – December 2024

- Designed and deployed a cloud-based Clinic Management System using MERN, serving **hundreds of daily patient interactions**.

- Built the National Horticulture Traceability System (Spring Boot + Angular + Flutter), enabling compliance and transparency across the agricultural sector.
- Developed the SOS Global Management System for SOS Children's Villages Rwanda, enabling real-time monitoring and reporting.
- Delivered multiple enterprise solutions end-to-end, from requirements gathering to deployment on AWS/GCP.

Junior Software Engineer | Renga Tech | Nairobi, Kenya

November 2022 – May 2023

- Contributed to the Coffee Information & Management Portal, handling national-level agricultural data.
- Supported ERP and traceability system deployments, ensuring scalability and reliability.
- Participated in agile ceremonies, debugging, and feature development for client-facing applications.

Intern Software Engineer | KBC | Nairobi, Kenya

April 2022 – November 2022

- Supported development of the Election Management System during a high-stakes national deployment.
- Built a facilities booking system and optimized ERP modules for improved reporting accuracy.
- Assisted with cloud deployments, enhancing availability and system reliability.

Part-time System Admin - Consultant | Karen Family Mart | Nairobi, Kenya

July 2021 – June 2025

- Developed an inventory management system, improving overall business productivity.
- Integrated **Microsoft Dynamics RMS** and **QuickBooks** for improved sales tracking and reporting.

Education

Master of Science in Artificial Intelligence (Ongoing) | Open University of Kenya, Nairobi, Kenya

2025 – (Ongoing)

- Focus: Machine Learning, Deep Learning, NLP, Robotics, AI Ethics.

BS Computer Science | The Catholic University of Eastern Africa (CUEA), Nairobi, Kenya

May 2019 – April 2024

- Focus: Mobile app development (Flutter, Kotlin), Distributed Systems, Software Engineering.
- Activities: Google Students Developer Club Lead support 2022-2023.

Software Engineering | Moringa School, Nairobi, Kenya

June 2024 – Present

- Intensive coursework in **Flutter, React, JavaScript, Python**, and cloud technologies, preparing for full-stack development roles.

Technical Skills

- **Programming Languages:** Python, Java, JavaScript, C++, Dart, C#, Kotlin
- **Frameworks:** React, Angular, Node.js, Flask, Django, Spring Boot, Flutter.
- **AI/ML & Data Science:** PyTorch, TensorFlow, Scikit-learn, NLP, Data Mining, Big Data (Hadoop, Spark).
- **Cloud & DevOps:** AWS, GCP, Azure, Docker, Kubernetes, CI/CD, Traefik.
- **Databases:** PostgreSQL, MySQL, MongoDB.
- **Other Tools:** Git/GitHub, Figma, Jira, Firebase.

Key Projects (Selected)

- Blockchain-enabled Traceability System (Solichain): Improved transparency in agricultural supply chains.
- National Horticulture Traceability System: Spring Boot + Angular + Flutter platform for compliance tracking.
- Hospital LIMS Enhancement: Cut report turnaround by 30% at MTRH.

References

1. Mr. Ben Mwai, Manager ICT,
Tel: 0722225533,
Email: benmwai@kbc.co.ke,
2. Ms. Gillian Mumbi, General Manager KFM,
Tel: 0725513754,
Email: mumbigillian54@gmail.com,

3. Abdelkarim Kaleem,

Tel: +91 6303640672

Email : kaleem@renga.tech

4. Abel Kiprop, Manager ICT

Tel: +254 727911444

Email: abelkiprop@mtrh.go.ke