

### Karanja Benjamin Njoroge

Professional Software Engineer 31/03/2004(21)

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#### **OVERVIEW**

As a highly skilled full-stack software developer with a proven ability to adapt and thrive in fast-paced environments. With a strong foundation in software engineering, including both professional and freelance experience, I bring a unique blend of technical expertise and creative problem-solving. My work spans various industries, where I have successfully delivered web and mobile applications, managed cross-functional teams, and continuously improved software solutions. I am particularly passionate about collaborating on international projects, and my experience in managing development processes, combined with my excellent communication skills, positions me well to contribute effectively to your initiatives.

### **⊖** Degrees and Majors

2021.08 - 2025.04	Bachelor of Science in Software Engineering
	Murang'a University Of Technology
	Pending
October 18, 2023	Introduction to Data Science
	Issued by <u>Cisco</u>
	https://www.credly.com/badges/9ac4a9cf-57a6-4468-93f8-d00a132e5c58
October 21, 2023	Introduction to IoT
	Issued by <u>Cisco</u>
	https://www.credly.com/badges/231057f2-8c67-4211-a725-2bf6ac766fff
February 07, 2024	Operating Systems Basics
	Issued by <u>Cisco</u>
	https://www.credly.com/badges/99bc5645-a771-4d90-9058-
	2ccd6325bed9

#### **Networking Devices and Initial Configuration**

Issued by Cisco

April 06, 2024

https://www.credly.com/badges/6017b48c-81db-42d0-ba58-fbd40b20df88

#### 2024.04 - 2024.07

#### Harmosoft

#### **Intern and Software Developer**

**Project:** HBS (Book Store) Project **Duration:** (4

months)

Role: Lead Developer (Intern)

#### **Technologies Used:**

Frontend: Next.js (TypeScript), Tailwind CSS

**Backend:** Django REST Framework (DRF),

PostgreSQL

Authentication: Django Allauth

Deployment & DevOps: Docker, AWS (EC2 &

S3), GitHub Actions for CI/CD

### Main Functionalities & Technologies Used: Functionalities:

- Online book catalog with search and filtering options
- User authentication and role-based access control
- Shopping cart and order management system
- Payment gateway integration for seamless transactions
- Admin dashboard for inventory and sales tracking

#### **Achievements:**

- > Led the development lifecycle from planning to deployment, ensuring timely delivery.
- > Collaborated with cross-functional teams to enhance performance and system security.
- > Integrated modern coding best practices to optimize functionality and improve maintainability.
- > Reduced page load time by **30%** through efficient API design and frontend optimizations.
- > Implemented CI/CD pipelines, reducing deployment time by **50%**.

#### 2025.01 - 2025.01

### Tovu Sacco Admin Dashboard & Mobile App

#### **Full-Stack Developer**

**Project:** Tovu Sacco Admin Dashboard & Mobile Application (**Duration:** 1 month)

Role: Full-Stack Developer

#### **Technologies Used:**

Frontend: Next.js (TypeScript), Tailwind CSS,

# Main Functionalities & Technologies Used: Functionalities:

- Comprehensive admin dashboard for managing users, loans, investments, transactions, and financial operations
- Secure authentication system for rolebased access
- > Interactive financial data visualization

shadcn/ui

Backend: Django REST Framework (DRF),

PostgreSQL

**Mobile App:** React Native (Expo Router)

Security & Deployment: Django Allauth, AWS,

Docker

and real-time insights

Mobile app for users to access financial services on the go

#### **Achievements:**

- Successfully developed and deployed the system within a short timeline.
- Ensured secure authentication mechanisms and real-time data synchronization.
- Improved user experience with a clean UI and efficient API responses.

GitHub Repository: **Order Toyu Sacco Repo** 

#### 2024.07 - 2024.07

#### Community Guardian (Mobile App) - Mobile

#### App Developer

Project: Community Guardian Mobile App

(**Duration:** 1 month)

Role: Mobile App Developer

#### **Technologies Used:**

Mobile App: React Native (Expo)

Backend: Django REST Framework (DRF),

PostgreSQL

Security: End-to-end encryption for secure

communication

# Main Functionalities & Technologies Used: Functionalities:

- Anonymous reporting system for crime prevention
- Emergency alert system for real-time notifications
- Direct updates from local law enforcement agencies

#### **Achievements:**

- Designed an intuitive and secure platform for community engagement.
- Ensured privacy protection for users reporting incidents.

GitHub Repository: **OCCUPY** Community Guardian Repo

#### 2024.08 - 2024.08

Immunity Shield (Intrusion Detection

System) - Al Developer

**Project:** Immunity Shield (**Duration:** 1 month)

Role: Al Developer

#### **Technologies Used:**

# Main Functionalities & Technologies Used: Functionalities:

- Real-time anomaly detection for cybersecurity threats
- Automated response mechanism to isolate potential threats
- > Machine learning models for intrusion

Al & ML: Python (Scikit-learn, TensorFlow)
<b>Backend:</b> Django REST Framework (DRF)
Security & Deployment: Docker AWS Lambo

pattern recognition

#### **Achievements:**

Developed an Al-driven IDS with 85% accuracy in detecting threats.

• Integrated real-time alerts and automated security measures.

GitHub Repository: **Order** Immunity Shield Repo

#### 2024.09 - 2024.09

# Carlgnition (Prototype for Vehicle Security) – IoT Developer

**Project:** Carlgnition (**Duration:** 1 month)

**Role:** IoT Developer

#### **Technologies Used:**

**IoT Hardware:** Raspberry Pi, Arduino **Software:** Python (Flask), MQTT Protocol

Mobile App: React Native (Expo)

# Main Functionalities & Technologies Used: Functionalities:

- Remote vehicle start and stop functionality
- Encrypted communication channels for security
- Mobile app integration for user-friendly control

#### **Achievements:**

- Successfully developed a prototype for vehicle automation.
- Implemented secure encrypted communication channels for safety.

GitHub Repository: **Orange Carle Control** Carles Ca

#### 2024.12 - 2025.01

Swift Traders (Mobile App) – Mobile App Developer

**Project:** Swift Traders Mobile App (**Duration:** 2 months)

**Role:** Mobile App Developer

#### **Technologies Used:**

Mobile App: React Native (Expo)

Backend: Django REST Framework (DRF),

PostgreSQL

**Analytics:** Firebase, Google Charts

**Achievements:** 

### Main Functionalities & Technologies Used:

#### **Functionalities:**

- Interactive trading lessons for financial literacy
- Simulated trading environment for hands-on learning
- User progress tracking and personalized recommendations

- Developed a user-friendly educational app for financial literacy.
- Integrated a real-time trading simulator to enhance learning.

GitHub Repository: Swift Traders Repo

### ☐ Technical Skills

- -Programming Languages: Python, JavaScript, TypeScript, SQL, C++
- -Web Development: Django (REST Framework), React, Next.js, HTML, CSS, Tailwind CSS, Bootstrap, Express.js
- -Mobile Development: React Native, Expo Router
- -Database Management: MySQL Workbench, PostgreSQL (PgAdmin), SQLite
- -API Development & Integration: RESTful APIs, JSON
- -Tools & Technologies: Visual Studio Code, Apache, Nginx, Docker, Git & GitHub, Postman, Node.js
- -Cloud & Deployment: Heroku, Digital Ocean, Python Anywhere, Infinity Free
- -Operating Systems: Windows, Ubuntu (Linux), WSL
- -Version Control: Git, GitHub, GitLab
- -CI/CD & DevOps: Docker Compose, GitHub Actions (if applicable)
- -Other Skills: Figma, Canva, CorelDRAW ,Postman
- -Security & Networking: Basic Cybersecurity Concepts, Intrusion Detection Systems, Isolation Forest Algorithm, Networking Essentials
- -Machine Learning (Basic): Scikit-learn, Data Analysis, Introduction to Al