



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

April 06, 2024

## Networking Devices and Initial Configuration

Issued by [Cisco](#)

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

<b>2024.04 – 2024.07</b> <b>Harmosoft</b> <b>Intern and Software Developer</b> <b>Project:</b> HBS (Book Store) Project <b>Duration:</b> (4 months) <b>Role:</b> Lead Developer (Intern)	<b>Main Functionalities &amp; Technologies Used:</b> <b>Functionalities:</b> <ul style="list-style-type: none"><li>➤ Online book catalog with search and filtering options</li><li>➤ User authentication and role-based access control</li><li>➤ Shopping cart and order management system</li><li>➤ Payment gateway integration for seamless transactions</li><li>➤ Admin dashboard for inventory and sales tracking</li></ul>
<b>Technologies Used:</b> <b>Frontend:</b> Next.js (TypeScript), Tailwind CSS <b>Backend:</b> Django REST Framework (DRF), PostgreSQL <b>Authentication:</b> Django Allauth <b>Deployment &amp; DevOps:</b> Docker, AWS (EC2 & S3), GitHub Actions for CI/CD	
<b>Achievements:</b> <ul style="list-style-type: none"><li>➤ Led the development lifecycle from planning to deployment, ensuring timely delivery.</li><li>➤ Collaborated with cross-functional teams to enhance performance and system security.</li><li>➤ Integrated modern coding best practices to optimize functionality and improve maintainability.</li><li>➤ Reduced page load time by <b>30%</b> through efficient API design and frontend optimizations.</li><li>➤ Implemented CI/CD pipelines, reducing deployment time by <b>50%</b>.</li></ul>	
<b>GitHub Repository:</b> <a href="#">🔗 HBS (Book Store) Project Repo</a>	


<b>2025.01 – 2025.01</b> <b>Tovu Sacco Admin Dashboard &amp; Mobile App</b> <b>Full-Stack Developer</b> <b>Project:</b> Tovu Sacco Admin Dashboard & Mobile Application ( <b>Duration:</b> 1 month) <b>Role:</b> Full-Stack Developer	<b>Main Functionalities &amp; Technologies Used:</b> <b>Functionalities:</b> <ul style="list-style-type: none"><li>➤ Comprehensive admin dashboard for managing users, loans, investments, transactions, and financial operations</li><li>➤ Secure authentication system for role-based access</li><li>➤ Interactive financial data visualization and real-time insights</li></ul>
<b>Technologies Used:</b> <b>Frontend:</b> Next.js (TypeScript), Tailwind CSS, shadcn/ui	

<b>Backend:</b> Django REST Framework (DRF), PostgreSQL <b>Mobile App:</b> React Native (Expo Router) <b>Security &amp; Deployment:</b> Django Allauth, AWS, Docker	➤ Mobile app for users to access financial services on the go
<b>Achievements:</b> <ul style="list-style-type: none"> <li>• Successfully developed and deployed the system within a short timeline.</li> <li>• Ensured secure authentication mechanisms and real-time data synchronization.</li> <li>• Improved user experience with a clean UI and efficient API responses.</li> </ul> <b>GitHub Repository:</b> <a href="#">🔗 Tovu Sacco Repo</a>	

<b>2024.07 – 2024.07</b> <b>Community Guardian (Mobile App) – Mobile App Developer</b> <b>Project:</b> Community Guardian Mobile App ( <b>Duration:</b> 1 month) <b>Role:</b> Mobile App Developer	<b>Main Functionalities &amp; Technologies Used:</b> <b>Functionalities:</b> <ul style="list-style-type: none"> <li>➤ Anonymous reporting system for crime prevention</li> <li>➤ Emergency alert system for real-time notifications</li> <li>➤ Direct updates from local law enforcement agencies</li> </ul>
<b>Technologies Used:</b> <b>Mobile App:</b> React Native (Expo) <b>Backend:</b> Django REST Framework (DRF), PostgreSQL <b>Security:</b> End-to-end encryption for secure communication	
<b>Achievements:</b> <ul style="list-style-type: none"> <li>• Designed an intuitive and secure platform for community engagement.</li> <li>• Ensured privacy protection for users reporting incidents.</li> </ul> <b>GitHub Repository:</b> <a href="#">🔗 Community Guardian Repo</a>	

<b>2024.08 – 2024.08</b> <b>Immunity Shield (Intrusion Detection System) – AI Developer</b> <b>Project:</b> Immunity Shield ( <b>Duration:</b> 1 month) <b>Role:</b> AI Developer	<b>Main Functionalities &amp; Technologies Used:</b> <b>Functionalities:</b> <ul style="list-style-type: none"> <li>➤ Real-time anomaly detection for cybersecurity threats</li> <li>➤ Automated response mechanism to isolate potential threats</li> <li>➤ Machine learning models for intrusion pattern recognition</li> </ul>
<b>Technologies Used:</b> <b>AI &amp; ML:</b> Python (Scikit-learn, TensorFlow) <b>Backend:</b> Django REST Framework (DRF)	

<b>Security &amp; Deployment:</b> Docker, AWS Lambda	
<b>Achievements:</b> <ul style="list-style-type: none"> <li>Developed an AI-driven IDS with <b>85% accuracy</b> in detecting threats.</li> <li>Integrated real-time alerts and automated security measures.</li> </ul>	
<b>GitHub Repository:</b> <a href="#">🔗 Immunity Shield Repo</a>	

<b>2024.09 – 2024.09</b> <b>Carlgnition (Prototype for Vehicle Security) – IoT Developer</b> <b>Project:</b> Carlgnition ( <b>Duration:</b> 1 month) <b>Role:</b> IoT Developer	<b>Main Functionalities &amp; Technologies Used:</b> <b>Functionalities:</b> <ul style="list-style-type: none"><li>➤ Remote vehicle start and stop functionality</li><li>➤ Encrypted communication channels for security</li><li>➤ Mobile app integration for user-friendly control</li></ul>
<b>Technologies Used:</b> <b>IoT Hardware:</b> Raspberry Pi, Arduino <b>Software:</b> Python (Flask), MQTT Protocol <b>Mobile App:</b> React Native (Expo)	
<b>Achievements:</b> <ul style="list-style-type: none"><li>• Successfully developed a prototype for vehicle automation.</li><li>• Implemented secure encrypted communication channels for safety.</li></ul> <b>GitHub Repository:</b>  <a href="#">Carlgnition Repo</a>	

<div>2024.12 – 2025.01</div> <div>Swift Traders (Mobile App) – Mobile App Developer</div> <div>Project: Swift Traders Mobile App (Duration: 2 months)</div> <div>Role: Mobile App Developer</div>	<div>Main Functionalities &amp; Technologies Used:</div> <div>Functionalities:</div> <div><div>➤ Interactive trading lessons for financial literacy</div><div>➤ Simulated trading environment for hands-on learning</div><div>➤ User progress tracking and personalized recommendations</div></div>
<div>Technologies Used:</div> <div>Mobile App: React Native (Expo)</div> <div>Backend: Django REST Framework (DRF), PostgreSQL</div> <div>Analytics: Firebase, Google Charts</div>	
<div>Achievements:</div> <div><div>• Developed a user-friendly educational app for financial literacy.</div><div>• Integrated a real-time trading simulator to enhance learning.</div></div> <div>GitHub Repository: <a href="#">🔗 Swift Traders Repo</a></div>	

## Technical Skills

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- 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 AI