

HILLARY CHEGE MUGO

SOFTWARE ENGINEER

CONTACT

- 📞 +254 701 360 714
- 📍 Nairobi, Kenya
- ✉️ hillarychege@techie.com
- 🌐 www.hillarychege.co.ke

EDUCATION

BSc Honors in Software Development

KCA University-Kenya - 2021 to Dec 2025

Diploma in Ethical Hacking
Alison Academy - April 2021 to May 2022

SKILLS

- **Frontend:** HTML, CSS, JavaScript, React js, vuejs, next js, nuxt js.
- **Backend:** PHP, Laravel, Nodejs, Typescript, C, C++, Java, Python
- **Database:** Mongo DB, MySQL, Superbase sql
- Cyber threat detection and analysis, Ethical hacking and penetration testing
- Business Process Automation and SEO

CERTIFICATION

- ✓ Google and Microsoft- Dev Town Bootcamp & Let'sUpgrade Bootcamp Web Developer
- ✓ Certifications- Dev Town Bootcamp & Let'sUpgrade Bootcamp CiscoCertified
- ✓ CiscoCertified NetworkAssociate (CCNA)- May 2023 to July 2023

ABOUT ME

Results-driven Full-Stack Software Engineer with experience designing and deploying scalable digital systems across sectors like education, finance, agriculture, and humanitarian sectors. Proven ability to architect end-to-end solutions, from backend logic and database design to dynamic, data-driven user interfaces that automate business processes and improve operational efficiency.

Skilled in building secure, high-performance applications with structured APIs, optimized data models, and maintainable system architecture. Experienced in multi-country deployments and remote collaboration having worked for different countries, delivering measurable organizational impact through innovative and scalable software solutions.

WORK EXPERIENCE

SOFTWARE ENGINEER

KIGUTU COMMUNITY FARM – BURUNDI (REMOTE-CONTRACT)
FEB 2026 – PRESENT

- Designing and developing internal digital systems to automate farm operations, inventory tracking, and reporting processes.
- Reducing manual administrative workload by 40% through workflow automation tools.
- Building RESTful APIs using PHP to manage production data, user roles, and operational workflows.
- Designing normalized MySQL database schemas with foreign key constraints to ensure data integrity and scalability.
- Implementing indexed queries and optimized JOIN operations to improve reporting performance.
- Applying MVC architecture and modular coding standards to ensure maintainable and scalable system design.

SOFTWARE DEVELOPER

RECAN REFUGEE NETWORK – KENYA | UGANDA | USA
(REMOTE-CONTRACT) DEC 2025 – FEB 2026

- Developed a digital networking platform connecting refugees to essential services, partners, and opportunities.
- Engineered scalable backend APIs to manage user profiles, partner organizations, and opportunity listings.
- Designed secure RESTful APIs with role-based authentication and structured JSON responses.
- Implemented relational database architecture to manage multi-country user data and partner organizations.
- Optimized backend queries and implemented pagination strategies to improve system scalability.
- Developed reusable React components and managed asynchronous API communication (Chat system) using modern JavaScript practices.
- Strengthened platform security through input sanitization, password hashing, and session management.

FREELANCE PROJECTS ACCOMPLISHED

Side Projects during my freelancing journey



Hostel Management system



Gym management system



Dental Clinic Management System



Car wash Management system



Employee management system

REFERENCES

Mr. Nathan

Automation lead Developer

Email :nathan.muturi@zotech.ac.ke

Mr. Mbuki

Senior Business Intelligence Analyst

Phone: +254 725 642 247

Email :jmbuki@kcau.ac.ke

B. Thomas "Tom" Henry

Startup Advisor/Resource
development and growth strategy
partner

Phone: +1 (413) 884-5726

Email : tom.henry@gmail.com

SOFTWARE ENGINEER

ZETECH UNIVERSITY – KENYA (CONTRACT-ATACHEE) FEB 2025 – APR 2025

- Built a centralized booking and inventory management system for the School of Media. A system that was implemented and currently used in the institution
- Improved booking efficiency by 60% by eliminating manual reservation processes.
- Automated equipment reservations, tracking, and fine management, reducing booking conflicts significantly.
- Designed relational database schema with indexing to enhance data retrieval speed.
- Implemented both client-side and server-side validation to improve data reliability.

WEB DEVELOPER

KCA University Sacco – Kenya(Contract) Sept 2024 – April 2025

- Led end-to-end development of the Sacco's official website.
- Installed and upgraded the financial institution Web-Plugin's
- Improved online visibility and SEO ranking, increasing member inquiries.
- Built secure, scalable architecture to support financial service integrations.
- Acted as technical consultant for digital transformation initiatives.

SOFTWARE ENGINEER

COSMETRIX LTD – NAIROBI, KENYA (APPRENTICESHIP)
MARCH 2023 – JULY 2023

- Engineered a dynamic in-system presentation module (PowerPoint-like feature) using React.js and Next.js, enabling teams to create and display interactive organizational reports directly within the platform.
- Developed a slide-based rendering engine with reusable UI components and dynamic state management.
- Built backend APIs using Node.js to process, structure, and deliver real-time business data for presentation visualization.
- Integrated data analytics into presentation slides, allowing automated generation of charts and performance metrics.
- Designed modular component architecture to support scalable slide templates and reusable content blocks.