ERIC TUYISHIME

FULL-STACK SOFTWARE DEVELOPER | TELECOMMUNICATIONS & NETWORK ENGINEERING

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PROFESSIONAL SUMMARY

Computer Science student and full-stack developer who designs and builds practical web systems, from React interfaces to NestJS APIs and PostgreSQL databases. Currently an industrial trainee at UR Binary Hub, contributing to Uni-Bridge, a role-based internship management platform. Brings hands-on telecommunications experience from Havilah Engineering Group, covering mobile-network infrastructure, radio links and field troubleshooting, and builds embedded-systems prototypes with Arduino.

TECHNICAL SKILLS

Frontend	React.js, Next.js, Vite, JavaScript, TypeScript, HTML5, CSS3, Tailwind CSS, responsive and component-based UI
Backend	Node.js, NestJS, Express.js, RESTful APIs, GraphQL, Swagger / OpenAPI, authentication, role-based access control
Databases	PostgreSQL, MySQL, Prisma ORM, MySQL Workbench, relational design, normalization, ERD, DFD
Embedded Systems	Arduino Uno, Embedded C/C++, Tinkercad Circuits, sensor and actuator interfacing (ultrasonic, soil moisture, servo, buzzer), LCD and keypad, serial communication
Telecom & Networking	BTS, BSC, MSC, RAN, 2G / 3G / 4G, radio and microwave transmission, point-to-point links, network configuration, monitoring, troubleshooting
Tools	Git, GitHub, VS Code, Figma, Cisco Packet Tracer, Wireshark, Moshell, Cygwin; Docker (currently learning)

PROFESSIONAL EXPERIENCE

Software Development Industrial Trainee

September 2026 – Present

UR Binary Hub, Kigali, Rwanda

- Contribute to Uni-Bridge, an internship management platform, improving features across frontend interfaces, backend integration and structured data workflows.
- Build role-based workflows serving students, company mentors, academic supervisors and institutional administrators.
- Develop reporting functionality, including internship joining and final-report features.
- Work within a collaborative, Git-based software development team.

Telecommunications Specialist & IT Engineering Intern

2022 – Present

Havilah Engineering Group, Kigali, Rwanda

- Gained hands-on exposure to mobile-network infrastructure, including Base Transceiver Stations (BTS), Base Station Controllers (BSC), Mobile Switching Centres (MSC) and Radio Access Networks (RAN).
- Worked in 2G, 3G and 4G environments, covering network configurations, connections and operational procedures.
- Took part in radio-link and microwave transmission work, including point-to-point links and telecommunications site installation.
- Supported field activities involving network connectivity, equipment configuration and troubleshooting.
- Used Moshell in a Cygwin environment for telecommunications operations tasks.

SELECTED SOFTWARE PROJECTS

Uni-Bridge / UR Internship Hub unibridge.urbinaryhub.rw

Internship management platform connecting students, host organizations, academic supervisors and university administrators. Covers application workflows, role-based access and report functionality. Stack: React, NestJS, Prisma, PostgreSQL.

Tourista Rwanda touristarwanda.com/explore

Tourism platform for discovering Rwandan destinations, hidden gems, cultural experiences and local businesses. Contributed to the React and Vite frontend, improving responsiveness and usability on smaller devices.

GreenDoc greendoc-beta.vercel.app
Browser-based word processor with rich-text editing, tables, charts, shapes and document formatting, supported by a backend API.

Muruhongore250 muruhongore250.ur.ac.rw
University of Rwanda platform for managing innovation projects and funding-related processes. Contributing to the institutional system that organizes project information and supports innovation and funding management.

AccPlan / FinalAcc accounting-dusky-six.vercel.app
Accounting application covering journals, ledgers, cashbooks, trial balance, balance sheets, income statements and day-end notifications. Backend built with NestJS, Prisma and relational databases.

Payment Integration Gateway
Platform connecting organizations with payment providers, with organization-specific API keys, payment types, destination accounts, payment links, invoices, transactions, balances and payouts, ledger records and reconciliation workflows.

ShopEasy shopeasy-ashen.vercel.app
E-commerce application for product discovery and online shopping, with responsive interfaces and payment-processing integration (Stripe, with other providers considered).

JobInRW job-in-rw.vercel.app
Employment platform tailored to the Rwandan job market, with job listings and application-related workflows.

Cargo Transport Management Platform
Software project supporting the organization and management of cargo transportation operations.

EMBEDDED SYSTEMS PROJECTS · ARDUINO UNO, TINKERCAD CIRCUITS

Smart Garbage Bin Monitor
Measures bin fill level with an ultrasonic sensor, averaging three readings for stability. Shows distance and status (Empty, Half, Full) on a 16×2 LCD, signals the level with green, yellow and red LEDs, and sounds a distinct buzzer alert for each state, including a siren when full.

Keypad Door Security System
Password-protected door lock using a 4×4 keypad and servo motor. A five-digit code is masked on an LCD; a correct code plays a chime and opens the door for five seconds, while a wrong code displays “Access Denied” and sounds a siren.

Soil Moisture Monitor
Reads a soil moisture sensor and classifies the soil as Dry, Medium or Wet on an LCD, with matching LED indication, a distinct buzzer tone per state and readings sent over the serial port.

EDUCATION

Bachelor of Computer Science · University of Rwanda — In progress

Advanced Level National Certificate (Mathematics, Economics and Computer Science) · GS Saint Esprit Mushaka

LANGUAGES

Kinyarwanda – Native **English** – Fluent **French** – Proficient **Swahili** – Conversational