

NTWALI YANIS

Full Stack Software & Embedded Systems Engineer

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PROFESSIONAL SUMMARY

Full Stack Software Engineer with expertise in designing and deploying scalable applications. Specialized in microservices architecture, backend frameworks (NestJS, Spring Boot), and modern frontend technologies (React, Next.js). Proven track record building enterprise-grade platforms with 99.5% uptime. Active open-source contributor with 817 contributions across 33+ repositories.

CORE TECHNICAL SKILLS

Backend: NestJS • Spring Boot • Node.js • Express • Laravel • Java

Frontend: React • Next.js • TypeScript • Tailwind CSS • React Native

Databases: PostgreSQL • MongoDB • MySQL • Prisma ORM

DevOps & Cloud: Docker • AWS • Git • CI/CD Pipelines • GitHub Actions

Embedded Systems: Arduino • C Programming • IoT Integration • Hardware Interfacing

Other: RESTful APIs • WebSockets • JWT Authentication • Microservices • System Design

PROFESSIONAL EXPERIENCE

Full Stack Software Engineer | Self-Employed / Open Source (2024–Present)

TerraFund – Agricultural Investment Platform

Architected microservices-based backend connecting landowners with agricultural investors. Implemented real-time chat, verification workflows, and secure transaction handling using Spring Boot and Docker.

Borrowly – Peer-to-Peer Lending Platform

Developed comprehensive backend for secure peer-to-peer lending with complex loan lifecycle management, JWT authentication, and dispute resolution workflows using Java and Spring Boot.

ShelfWise – Store Management System

Built production-ready backend for inventory, orders, and product management using NestJS and Prisma. Optimized database queries achieving 40% improvement in data retrieval performance.

Solvify – E-Learning Platform

Engineered full-featured e-learning platform using Next.js and TypeScript with Google OAuth authentication, course management, and responsive UI achieving 90+ Lighthouse scores.

LegitRides – Ride-Sharing Platform

Developed innovative ride-sharing application featuring world's first mutual trip exchange system with comprehensive dispute resolution using Node.js and MongoDB.

AirVolt – Smart Home Energy Management

Engineered IoT system integrating Arduino microcontrollers with backend services for real-time energy monitoring and automated device control.

KEY ACHIEVEMENTS

- Built enterprise-grade platforms serving thousands of users with 99.5% uptime and 99.9% reliability

- Architected microservices systems using Spring Boot and Docker for horizontal scalability
 - Contributed 817 commits across 33+ public repositories demonstrating collaborative development
 - Designed and optimized PostgreSQL databases reducing query time by 40%
 - Implemented CI/CD pipelines reducing deployment time by 60%
 - Developed innovative mutual trip exchange system for LegitRides platform
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EDUCATION

Rwanda Coding Academy (RCA)

Software Programming, Embedded Systems, Cyber Security | High School Student

Ecole de Sciences Byimana

Ordinary Level | Secondary Education

Kigali Parent School

Ranked 1st in National Primary Leaving Examinations (Rwanda)

OPEN-SOURCE & PORTFOLIO

GitHub: 817 contributions | 33+ public repositories | 43 starred repositories

Portfolio: ntwali-yanis.vercel.app – Interactive portfolio showcasing all major projects

Languages: English (Fluent) • French (Conversational) • Kinyarwanda (Native)

References and detailed project information available upon request.