

JOSEPH NJUGUNA KAMAU

Full-Stack software Engineer | IoT & Telematics Systems

Ajman, UAE
+971503984570
josephnjuguna00@gmail.com

GitHub
github.com/Sogon-Njugush
Portfolio
joseph-portfolio-mu.vercel.app
LinkedIn
linkedin.com/in/josephnjuguna

PERSONAL STATEMENT

Software Engineer with 5+ years of experience designing scalable backend systems, telematics integrations, and enterprise applications. Skilled in Node.js, NestJS, microservices architecture, and API integrations, with hands-on experience integrating the Wialon fleet management platform with enterprise systems. Proven ability to build high performance applications, process real-time telemetry data, and lead cross-functional development teams. Passionate about building reliable, maintainable software that solves real-world operational challenges.

CORE SKILLS

- **Backend:** Node.js, NestJS, Express
- **Frontend:** Next.js, React, Flutter
- **Architecture:** Microservices, REST APIs, Event-Driven Systems, Multi-Tenant SaaS
- **Databases:** PostgreSQL, MySQL, MongoDB, Redis
- **DevOps & Infrastructure:** Docker, Linux, CI/CD (GitHub Actions)
- **Telematics & IoT:** Wialon Integration, GPS Devices, Fleet Telemetry Processing

PROFESSIONAL EXPERIENCE

Fleet & Telematics Integration Engineer

Trackline Security System Installation L.L.C
June 2025 – Present, UAE

- Developing integrations between the Wialon telematics platform and enterprise systems, enabling real-time telemetry processing for 1000+ fleet devices.
- Designing microservice-based backend architecture supporting real-time fleet telemetry ingestion and analytics
- Built middleware services processing real-time telemetry from 2000+ GPS devices, integrating Wialon APIs with internal enterprise systems.
- Implementing fleet monitoring features including geofencing, driver behavior analytics, fuel monitoring, and automated alerts.
- Developing automation dashboards used by operations teams to monitor 2000+ vehicles in real time, reducing manual reporting workload.
- Troubleshoot device connectivity issues, telematics protocols, and data synchronization problems.
- Evaluating and integrating new GPS tracking devices and telematics APIs.

Lead Software Engineer

IQ Things Ltd

May 2021 – June 2025 , Kenya

- Spearheaded the design and development of scalable and maintainable software solutions by leveraging best practices and architectural patterns, ensuring robustness and efficiency in the codebase
- Worked closely with product managers and architects to define requirements and prioritize features, ensuring that development efforts align with business goals
- Lead cross-functional teams of engineers, designers, and data scientists to deliver high-quality software on time and within budget
- Develop proof-of-concept applications to demonstrate the feasibility and potential of new ideas
- Mentored junior engineers and interns, improving onboarding satisfaction scores to 93%+.

Software Developer Intern

Presidential Digital Talent Program

July 2019 – July 2020, Kenya

- Collaborated with senior developers to design and implement core features of an intranet file-sharing system using PHP Laravel, ensuring efficient and secure file management within a corporate environment.

- Developed RESTful APIs in Laravel to facilitate seamless communication between the frontend and backend, enabling functionalities such as file uploads, downloads, and user permissions management.
- Participated in code reviews and collaborated with team members to troubleshoot and resolve issues, contributing to the stability and reliability of the intranet file-sharing system.
- Engaged in agile development methodologies, attending sprint planning meetings and daily stand-ups to track progress and deliver incremental updates to the file-sharing system.

KEY PROJECTS

Q-TASK (SaaS Multi-Tenant Platform)

Live: <https://zanex.ckzgroup.com>

A multi-tenant task and project management system designed for enterprise operations.

- Technologies: Next.js, Flutter, Node.js, PostgreSQL, Redis, Docker

Key Features:

- Multi-tenant architecture supporting multiple organizations
- Real-time project tracking and ticket management
- Warehouse integration for materials tracking
- Role-based access control and audit logs
- Real-time reporting dashboards

Used by multiple companies across East Africa for network operations management.

Q-DRIVE (Fleet Intelligence Platform)

Live: <https://ckz-q-drive.vercel.app>

Fleet and driver monitoring system integrated with the Wialon telematics platform.

- Technologies: Node.js, NestJS, REST APIs, PostgreSQL

Features:

- Real-time fuel monitoring
- Driver behavior analytics
- Fleet health monitoring
- Vehicle service scheduling

Alerting system for abnormal vehicle activity

EDUCATION

BSc Computer Technology

Meru University, Kenya

Second Class Upper Division

TECHNICAL INTERESTS

- Machine Learning and Artificial Intelligence
- Distributed Systems and Cloud Infrastructure