

KINGSLEY IHEMELANDU (Systems Engineer | Robotics & Software)

+2349035810428 | [Email](#) | [GitHub](#) | [LinkedIn](#) | [Portfolio](#)

TECHNICAL SKILLS

Languages: Python, JavaScript, TypeScript, Go, Java, C++, Rust.

Frameworks: React, React Native, Next.js, Node.js, Express.js, Django, Flask, Redux, Jest, Cypress, Pytest

Robotics & Systems: Embedded Systems, Microcontrollers (Arduino/ESP32), ROS (Robot Operating System), Gazebo Simulation, TurtleBot3, PID Controllers, Sensor Integration (DHT, Proximity, Light, LCD), MATLAB, Python (DSA & Robotics).

Databases: PostgreSQL, MongoDB, MySQL, Redis

DevOps: Linux, AWS, Bash, Git, Docker, GitHub Actions, GitLab CI

Tools: TailwindCSS, ShadCN, Bootstrap, AI Tools

EXPERIENCE

Lead Engineer

January 2025 - March 2026.

NextvibeCo.

- Spearheaded Nextvibe, an event discovery platform based on user interests and location.
- Integrated AI for gamification and recommendation systems, improving user retention.
- Built and deployed a production NestJS backend covering 11 API modules, integrating PostgreSQL, Redis caching, Swagger docs, and CI/CD via GitHub Actions and Docker.
- Secured VPS with firewall and SSH hardening to prevent unauthorized access.

Backend Engineer

September 2024 - June 2025.

Simesta AI

- Developed Simesta AI, an AI-powered app tailoring learning methods to users.
- Integrated CI/CD with GitHub Actions and Docker, reducing production time by 15%.
- Implemented secure authentication/authorization with tokens and OAuth.
- Optimized PostgreSQL queries for faster server response times.

Software Engineer

October 2024 - June 2025.

Kaza

- Led development of a crypto-fintech mobile app using React Native, enabling users to manage digital asset portfolios and execute fiat-to-crypto conversions seamlessly.
- Integrated the Quidax API to power real-time crypto trading, balance management, and transaction processing within the app.
- Implemented transaction history and fiat/crypto conversion flows, handling live exchange rates and ensuring accurate financial state management.
- Optimized MongoDB queries, reducing response times by 20%.
- Implemented secure token-based authentication and authorization to protect sensitive financial data and user accounts.

Software Engineering Intern

June 2022 - September 2022

Eccles IT Ltd.

- Developed web application features using React, HTML, CSS and Django, contributing to both frontend interfaces and backend functionalities including database integration and API implementation.
- Automated development tasks using Bash scripting, reducing manual effort and improving team workflow efficiency.
- Managed version control and collaborative development using GitLab, participating in code reviews and ensuring code quality across the team.

Software Engineer

March 2025 - August 2025.

Indulgetix.

- Revamped Flask backend and React Frontend for improved structure and maintainability.
- Optimized MySQL queries, reducing data processing time by 30%.
- Implemented Redis cache and CI/CD pipeline with GitHub Actions and Docker, lowering deployment time by 50%.
- Configured secure VPS with firewall and SSH hardening for enhanced security.

Full-Stack Developer

January 2023 - June 2023.

Octave Incorporations

- Built responsive frontend interfaces using React and implemented scalable backend services with Node.js for seamless API integrations.
- Developed secure web applications using Django, collaborating with cross-functional teams to analyze requirements and architect efficient solutions.
- Conducted code reviews, testing and debugging to maintain code quality and ensure error-free application performance.

Founder & CEO / Software Engineer

January 2025 - Present.

Spectroniq Limited

- Founded and led Spectroniq Limited, delivering custom software solutions to clients and developing innovative products such as StackSculptor, a tool that turns ideas into deliverables with seamless AI integrations for PRD creation, System Design etc.
- Implemented AI driven features in StackSculptor, enabling users to generate and share deliverables, enhancing efficiency and user engagement.
- Managed end-to-end development of client projects, utilizing technologies like NodeJs, React and Django to build scalable and secure web applications.

EDUCATION

University of Lagos

October 2020 - Present.

BSc. Systems Engineering

CGPA: 3.72/5.0.

Related Coursework: Data Structures and Algorithms, Computer Programming, NLP, AI, Robotics & Automation, Control Systems Engineering, Embedded Systems, Microprocessors, Signals & Systems, NLP, and AI.

Technical Focus: Linear Algebra, Differential Equations, Systems Modelling, and PID Control Loops.

Lab Experience: ROS setup & navigation (TurtleBot3/Gazebo), autonomous environment detection & movement, sensor integration (DHT11, proximity, light sensors, LCD displays), MATLAB modeling, PID control implementation

CERTIFICATIONS

Hatchdev Fullstack Software Engineer.

2024.

NitHub

[View Certificate](#)

PROJECTS

UNILAG Map (Personal)

- Built an interactive University of Lagos map using React and Canvas.
- Applied Dijkstra's algorithm for optimal pathfinding — foundational to motion planning in autonomous systems.

- Applied Dijkstra's algorithm for optimal pathfinding — directly applicable to scheduling and coordination logic in multi-agent systems.
- GitHub: [Unilag Pathfinder](#) | Live: [Unilag Pathfinder Live](#)

Project Management System (Personal)

- Developed a system using Next.js and Express.js with Redis cache for faster project loading.
- Added drag-and-drop functionality for project organization.
- GitHub: [GitHub Link](#) | Live: [Live Link](#)

NodeJS database backup utility (Personal)

- Created a CLI tool for backing up PostgreSQL and MongoDB databases.
- GitHub: [Github Link](#)

ROS Navigation & Sensor Integration (Academic Lab)

- Configured Ubuntu/ROS environment and deployed TurtleBot3 in Gazebo simulation.
- Implemented autonomous environment detection and movement behaviors.
- Integrated sensors (DHT11, proximity, light) and LCD output on Arduino/ESP32.

HTTP Server from Scratch (Personal)

- Built a fully functional HTTP server in Go from the ground up, implementing TCP connection handling, request parsing, and response formatting without external frameworks.
- GitHub: [GitHub](#)

VOLUNTEERING

Student Ambassador

June 2023 - Present

Cowrywise.

- Represent Cowrywise on campus, promoting financial literacy and driving student awareness of personal finance and investment tools.
- Organize and facilitate workshops, events, and outreach initiatives to expand Cowrywise's presence within the student community