EMMANUEL ADEMOLA

SOFTWARE ENGINEER

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SUMMARY

Highly dedicated and results-driven software engineer with 3+ years of expertise in web development, system programming, IoT and robotics. Specialise in building and deploying scalable, high performance web applications particularly with Django, Django REST Framework, Flask, FastAPI, Celery and Django Channels.

Proficient in designing and implementing innovative solutions including custom authentication workflows, dynamic form handling, caching strategies, serverless architectures and API integrations. Experienced in managing full application lifecycles—from gathering requirements to deployment on platforms such as AWS, DigitalOcean, Render, PythonAnywhere, Vercel and Heroku. Collaborative team player with a track record of mentoring, technical instruction, and leading student projects to national competitions.

EXPERIENCE

Backend Developer (Contract)

April 2025 - Present

Confidential Travel-Tech Firm – Remote

- Working on a travel-booking web and mobile platform for a finance-tech client.
- Designed and implemented role-based access control using Django REST Framework.
- Built a reporting API to deliver real-time metrics on users, bookings and revenue.
- Automated CI/CD on a cloud VPS.
- Coordinated with frontend to align on API versioning and endpoints.

Software Engineer - Full Stack

January 2025 – Present

Media10 Studios - Remote

- Build and maintain scalable APIs using Diango and Flask to power web applications.
- Design secure user authentication with JWT and implement session management using Redis.
- Manage PostgreSQL databases and optimised query performance for high-traffic systems.
- Automate CI/CD deployments using GitHub and cloud VPS hosting.

C.T.O / Technical Instructor

April 2022 - April 2025

EduPoint Limited, Lagos

- Served as Chief Technology Officer, providing technical leadership to 10+ cross-functional teams; improved issue-resolution time by 35% through structured collaboration and streamlined communication channels.
- Designed and prototyped robotics solutions—integrating microcontrollers, sensors and actuators—to enhance student projects; resulting in 3 national competition wins.
- Taught coding (Python, JavaScript) and robotics (Arduino, Vex) to 200+ students; 80% progressed to advanced levels.
- Led student teams to victory in 3+ national coding and robotics competitions, elevating the school's recognition and student placement rates.

Backend Developer Intern / Technical Instructor

October 2019 – November 2022

UNITeS Cisco Networking Academy

- Collaborated with a cross-functional engineering team using Git for version control and Agile methodologies; contributed to sprint planning and backlog refinement.
- Assisted in database model design (MySQL, PostgreSQL) and optimised queries for efficient student record management

- Contributed to unit and integration tests using pytest and unittest, ensuring consistent and reliable API behaviour.
- Conducted hands-on sessions for 500+ students, achieving a 90% improvement in their networking and programming competencies.
- Streamlined data entry processes, reducing administrative errors by 25%.

Data Analysis Instructor

November 2021 – February 2022

USADF / LSETF

- Trained 15+ students in Python-based data analysis (pandas, NumPy, matplotlib), achieving an 85% course completion rate.
- Guided learners in interpreting datasets, enhancing data-driven decision-making skills; 60% secured internships or full-time roles post-training.

WordPress Web Developer / Technical Support

August 2015 – April 2016

Ifeoluwa Ventures, Lagos

- Designed and developed custom WordPress websites for schools, SMEs and nonprofits using Elementor and custom themes.
- Modified templates via child themes to meet unique client requirements; managed WordPress security (Wordfence) and performance (LiteSpeed Cache).
- Processed and managed 10+ documents daily in a cyber café, improving workflow efficiency by 25%; developed foundational skills in computer operations and office applications

PROJECTS

Quizzen App (2025) – Demo | Preview

An interactive quiz platform with real-time scoring and leaderboards. Features OAuth login, responsive UI and RESTful backend.

CurrencyMate (2024) – Preview

Real-time currency conversion tool leveraging external exchange-rate APIs. Implemented caching layer with Redis to reduce API calls and improve response times.

• EcoBin (2024) - Demo | GitHub

Smart waste bin with ultrasonic sensors and motion detection to eliminate physical contact. Microcontroller-driven automation with real-time fill-level monitoring.

Radiance Smart City (2023) – <u>Demo</u> | <u>GitHub</u>

Arduino-powered smart-city system featuring automated street lighting, RFID-based access control and flood detection sensors.

• Simple Shell (2023) - GitHub

UNIX command interpreter (shell) built in C. Supports built-in commands, I/O redirection, piping and job control.

EDUCATION

•	Software Engineering ALX Africa	2025
•	BSc. (Ed.) Computer Science University of Benin	2020

PROFESSIONAL CERTIFICATES

Data Analytics

Software Engineering - ALX Africa ✓ **IT Essentials** - Cisco ✓ Python - Cisco, Sololearn, TechQuest Introduction to CyberSecurity - Cisco ✓ HTML - Sololearn ✓ Introduction to IoT - Cisco ✓ CSS - Sololearn Networking - Cisco

Soft Skills Training

- Jobberman

✓ Leadership - Myles Leadership University

- Side Hustle 5.0

SKILLS

✓

✓ Languages & Frameworks: Python • Flask • Django • Django REST Framework • HTML • CSS • JavaScript
 • TypeScript • Node.js

✓ Databases & Caching: MySQL • PostgreSQL • Redis • MongoDB

✓ DevOps & Deployment: AWS • DigitalOcean • Render • PythonAnywhere • Heroku • Docker • HAProxy
 • NGINX • systemd • CI/CD (GitHub Actions)

✓ Other Technologies: Authentication • JWT • RESTful API Development & Integration • WebSockets

• Microcontrollers (Arduino) • Sensors • Pictoblox • TinkerCAD • Fritzing

✓ Soft Skills: Version Control • Performance Optimisation • UI/UX Implementation • Project Management

• Team Collaboration • Curriculum Development • Technical Writing • Time Management

• Communication • Problem-Solving • Leadership

AWARDS & ACHIEVEMENTS

- ✓ Finalist Fuze Talent Show 3.0 (2024)
- ✓ Winner STEMITE Zone Fair –Junior Category (2024) (EcoBin Project)
- ✓ Winner Edupoint RoboCode Fest 2.0 (2023) (Radiance Smart City Project)
- ✓ Second Place Robocode Fest 1.0 (2024) (RSB 1.0 Smart Bin Project)
- ✓ Most Outstanding Tutor EduPoint Limited (2022)

LEADERSHIP & VOLUNTEERING

- ✓ Chief Technology Officer EduPoint Limited (2024 2025)
- ✓ **Co-Founder & Coordinator** − R2-7 Foundations (2022 − Present)

REFERENCE

Available upon request