







Chukwuma Somtochukwu Emmanuel

Software Engineer | Backend Developer | DevOps Engineer

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Profiles	 Chukwuma Somtochukwu	
	 chuks_somzzy	
	 chukssomzzy	
Summary	Software Engineer with Mechatronics foundation, specializing in distributed systems and high-performance backend architectures. Led development of mission-critical applications processing 10,000+ daily transactions across IoT, legal tech, and fintech domains. Demonstrated expertise in optimizing system performance by up to 70% through microservices architecture and efficient algorithms. Core technical proficiency includes Python, AWS, Docker, and C++, with proven track record of reducing deployment times by 60% through containerization. Passionate about architecting scalable solutions that bridge hardware and software domains while maintaining 99.9% system reliability.	
Experience	1worq	Remote
	Backend Engineer (python) https://1worq.com <ul style="list-style-type: none">Engineered 20+ GraphQL mutations reducing task management workflow time by 45% for 100+ legal professionalsImplemented RBAC system with 5 role hierarchies, ensuring 100% compliance with legal data access protocolsDeveloped real-time messaging system with Redis pub/sub handling 10,000+ daily communications with <100ms latencyOptimized S3 file management system reducing upload times by 60% and storage costs by 35%Achieved 95% test coverage with 200+ unit tests and 50+ integration tests using pytest Tech stack: Python, GraphQL, Docker, AWS (ECS, S3), PostgreSQL, Redis, Docker Compose	
	Cardioll	Onsite
	Lead Engineer <ul style="list-style-type: none">Architected and led development of IoT heart monitoring system achieving 98% accuracy in detecting arrhythmiasReduced data processing latency by 70% through optimized C++ algorithms, achieving <50ms response time for critical alertsImplemented real-time anomaly detection achieving 95% sensitivity for irregular heartbeat patterns Tech stack: C++, Python, Javascript, Firebase	
	paywifigo	remote
Projects	backend engineer https://paywifigo.me/ <ul style="list-style-type: none">Engineered a PHP-based business analytics dashboard that reduced financial reporting time by 60% for 50+ merchantsImplemented 8 interactive data visualization modules tracking revenue, expenses, and profit margins in real-timeDesigned and developed 5 key user workflows resulting in 30% improvement in merchant task completion rate Tech stack: PHP, MySQL, JavaScript, HTML/CSS, Bootstrap	
	HNG Internship	Remote
	Intern https://github.com/hngprojects/hng_boilerplate_python_fastapi_web/ FastAPI Boilerplate - Contributor <ul style="list-style-type: none">Architected and implemented TOTP-based 2FA authentication system, enhancing security for 1000+ potential usersDeveloped 6 RESTful endpoints for team management with role-based access control, increasing project functionality by 25%Integrated industry-standard TOTP algorithm compliant with RFC 6238 Contributed 1000+ lines of production code and resolved 8 high-priority issues Tech stack: Python, FastAPI, PyOTP, Base32, HMAC-SHA1	
	Federal University Of Technology Owerri	August 2018
	Mechatronics Engineering https://futo.edu.ng	
Technical Skills	ALX AFRICA	August 2022
	Software Engineering https://www.alxafrica.com/	
	Youtube Summarizer	
	Transcribe and summarize a video https://tifi.tv/youtube-summarizer Langchain, Openai, AI, FastApi, Celery (Queuing system)	
	Talking GPT	
Skills	Full Stack AI Chat Application https://github.com/abimbola-michael/Talking-GPT <ul style="list-style-type: none">Collaborated on an AI application to add a talking feature to an existing AI chat application.Developed using Git, Node.js, Express, OpenAI, and React.Implemented voice integration to enhance user interaction and provide a unique twist.Coordinated with team members to ensure seamless integration and functionality.Utilized agile methodologies for efficient project management and delivery. Nodejs, expressjs, Vitejs, mongodb, moongoose	
	File Manager	
	A file storage API https://github.com/abimbola-michael/alx-files_manager <ul style="list-style-type: none">Developed a file-sharing application using Express, MongoDB, and Redis.Implemented user authentication and authorization for secure access control.Conducted testing to ensure functionality and reliability.Utilized Redis for efficient caching and improved performance. redis, mongodb, pagination, unit and integration testing, Queuing System, Background Processing	
	Cheaper Phone	
	An ecommerce application https://github.com/chukssomzzy/cheaper_phone <ul style="list-style-type: none">Designed the architecture and database using a top-down approach.Developed an e-commerce application with Flask, jQuery, Docker, and Docker Compose.Deployed on Ubuntu VM with Nginx and managed services with systemd.Implemented RESTful APIs, database integration, and dynamic frontend updates. Api Design, Flask, Docker, Containerization, Docker-compose, sqlalchemy, jquery, html templating	
Interests	Simple Shell	
	A clone of the bash terminal in C https://github.com/chukssomzzy/simple_shell c, terminal emulator, bash, multiprocessing	
	Monty	
	A simple stack based interpreter in c https://github.com/chukssomzzy/monty queues, stack, intepreter, bytecodes	
	Leadership	
Certifications	Leadership skill ● ● ● ● ● project management	
	Team management ● ● ● ● ●	
	Communication ● ● ● ● ●	
	Embedded System	
	Blockchain Technology Ethereum, solana	
Languages	HNG Internship Certificate	July 2024
	HNG https://certgo.app/c-e4aa72c0	
	ALX Software Engineering Certificate	April 2024
	https://alxafrica.com https://intranet.alxswe.com/certificates/z6pxNFYXTJ	
	Mechatronics Engineer	Feb 2018 - 2023
Languages	Federal University Of Technology	
	West African Senior School Certificate Examination (WASSCE)	Feb 2018
	West African Examinations Council (WAEC)	
	English	
	English Language ● ● ● ● ●	