Bolu Agbana

Software Engineer

SUMMARY OF QUALIFICATIONS

6 years of professional experience spanning across eCommerce, automobile and transportation industries. I possess strong skills in web and mobile application development.

Proficient at developing and maintaining infrastructure for highly available and hyper scalable distributed systems implementing testing frameworks, monitoring & reporting systems, automated cloud deployments following standard CI/CD procedures.

My passion for system design, automation, and testing drives my commitment to delivering quality solutions.

EXPERIENCE

Centennial College, Toronto — Software Engineer

JULY 2023 - DEC 2023

Collaborated with Archocell, an industry partner, in the full-stack development of a cross-platform mobile application for tracking electric vehicles.

- Designed and implemented features for Node.js (Express) websocket backend, Arduino micro-controller, and a cross platform React Native application backed by MongoDB.
- Collaborated in programming an Arduino micro-controller to read and transmit Battery and Geo-location data in real time to the cloud through websockets.
- Designed and implemented cross platform mobile application according to UI design using ReactNativePaper, Redux and Websockets to show realtime location of all vehicles in the fleet through the Google maps SDK.
- Designed a websocket backend using Express Js MongoDB allowing for real time tracking of vehicle location and battery status.
- Deployed the web application containerized in docker containers on a highly available kubernetes cluster.

Excite Panacea Limited — Senior Full Stack Software Engineer

SEPTEMBER 2019 - MARCH 2023

Designed and developed and provided support for various client projects.

• Participate in client product meetings to understand clients needs and

Toronto, Canada (437) 994-3558 agbanabolu@gmail.com

LINKS

<u>Portfolio</u>

<u>Linkedin</u>

SKILLS

Kubernetes Docker Python JavaScript Node.js Express.js Nest.js React.js React Native HTML & CSS SQL NoSQL Micro-services AWS Cloud **Distributed Systems Testing & Monitoring**

CERTIFICATIONS

FastAPI Masterclass certificate of completion design solutions to address them.

- Lead teams of engineers to develop various applications and projects. Serving as a mentor to junior engineers where needed.
- Deployed robust solutions that are highly available implementing modern technologies and frameworks like Django, FastAPI, ExpressJs, NestJs, React, React Native, Redux, Websockets, Redis, Docker, and Kubernetes. Following CI/CD best practices and testing procedures.
- Migrated entire company deployments to a managed kubernetes cluster. Implementing CI/CD with Jenkins along with Prometheus and Sentry for monitoring and reporting.
- Mentored junior developers on the importance and how to setup comprehensive end-to-end testing, from simple unit tests to more intricate testing frameworks.

Spareworks Limited; 234Parts — Senior Software Engineer

OCTOBER 2019 - MARCH 2023

Led a team of engineers to raise over a million dollars in pre-seed capital. This funding was instrumental in their endeavor to revolutionize the automotive industry in West Africa by leveraging vehicle and auto-part data to simplify vehicle part sourcing and matching, enabling an efficient supply chain for automotive repair and maintenance.

- Designed and implemented features for a Node.js and Python microservices API backed by AWS infrastructure, taking ownership of key services that support the efficient daily ingestion and manipulation of over 100,000 autopart listing records.
- Developed an admin CRM dashboard utilizing React, TypeScript, CSS, and Redux for in-house consumption and manipulation of website data feeding from a django API backend.
- Engineered robust API backend solutions, using Django, PostgreSQL, Celery, Redis, Docker, and AWS S3 for hosting all static files enhancing the application's overall efficiency and responsiveness.
- Integrated with 3rd party services like Firebase, OneSignal, Paystack, VinAudit, CarsXE etc..
- Developed a celery based notification system for continuous engagement with customers via email and push notification.
- Developed a websocket backend service using Django-channels for handling real time messaging between users on 234Parts.
- Introduced comprehensive end-to-end testing strategies, leading to a significant 20% reduction in regression and undetected bugs.

Sellsar — Full Stack Software Engineer

JANUARY 2020 - PRESENT

Spearheaded the development of an ecommerce software that allows sellers create their custom storefronts in minutes also allowing them the ease of taking local and international orders through integrations to various payment and shipping providers.

• Utilized Django and FastAPI in developing a multi-tenant microservices based API backend that served React based storefronts dynamically

depending on the store route being called.

- Implemented both SQL and noSql databases with a multi-schema Postgresql database as primary database and MongoDb for running other services.
- Setup a self-managed 4-node Kubernetes cluster that is cloud provider agnostic to handle production deployments through a CI/CD pipleline managed by jenkins.
- Setup comprehensive monitoring & reporting systems using Prometheus and Sentry.
- Setup multiple environments from Live, Staging to Dev. Allowing for separation of concerns making development easier and less intrusive.
- Led quality control initiatives by implementing a comprehensive suite of unit, integration, and end-to-end tests using tools like Jest, React Testing Library, Mocha, and Selenium, thereby improving system reliability and performance.

EDUCATION

Centennial College, Toronto — Graduate Diploma

July 2023 - December 2023 Software Engineering Technician

Covenant University, Nigeria — Bachelor of Engineering

September 2012 - July 2018 Electrical and Electronics Engineering

PROJECTS

Grabba — Web Data Capture Software — https://grabba.site/

Grabba is at the bare minimum a website screenshot tool. You pass a URL to it and it captures the live page according to the configurations attached to the request.

The basic business use case would be for generating PDF files from a URL that contains HTML invoices, receipts, certificates or the likes.

I built Grabba with Nest.js running as an API backend in a docker container and React.js at the frontend.