# Momodu Ahmed

Python Engineer

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A dynamic **Python Engineer** with sound technical expertise on software development protocols, having vast experience on **product architecture** and **development of web applications** for corporate institutions and organizations.

**Creative** and **Highly organized** self-starter with an eye for appealing designs, **Adept** in developing state-of-the-art technologies while paying close attention to **efficiency**.

#### **SKILLS**

- **Programming Languages** Python, JavaScript, HTML, CSS.
- Backend Frameworks Django, Flask, FastAPI.
- Frontend Frameworks ReactJS, Angular.
- **UI/UX** Product Design(Web & Mobile), Wireframes, Prototypes, Data Visualisations.
- **Databases** MySQL, SQLite, PostgreSQL.
- Authentication Custom-auth, Rest-knox, OAuth toolkit, JSON-Web token
- Version Control/CI Github, Git, Docker.
- Cloud Infrastructure AWS, Google Cloud.
- Deployments Vercel, Python Anywhere, Heroku, AWS, Google-Cloud.

#### **EXPERIENCE**

### JCP Network Consults Limited - Python Engineer

JANUARY 2023 - Date

- Executed entire product development from startup to deployment according to instructions and data from the project lead.
- Implemented Git for version control, overseeing repository setup, branch operations, commits, conflict resolution, collaboration, and milestone tracking.
- Designed and maintained the front end customized interfaces and media compatibility for seamless experience and responsiveness using HTML, CSS, JavaScript.
- Developed the backend component and APIs using Python(Django), implementing OOP, authentication(security), payment integration and designed database(SQL) models.
- Debugged product code, refactored application models, and optimized database to ensure data security, efficient storage and swift retrieval.

#### **Vatebra Limited(Hybrid)** - Full Stack Developer

JUNE 2021 - SEPTEMBER 2022

- Developed reusable and comprehensive test software for upcoming features, prioritizing robustness and reliability in the integration process.
- Ensured the alignment of architectural solutions, program design, and functionality validation through meticulous integration testing, review, and ongoing maintenance to enhance performance.
- Implemented modern design technologies such as CRUD operations, class and function-based views, templates, API gateways, decorators, mixins, static files, secure authentication protocols, payment gateways, leading the project through deployment.
- Designed project flowsheets and ER diagrams to visualize design models, data arrays, and databases,

- adhering strictly to best practices for design and product architecture.
- Spearheaded the implementation of Git for version control, overseeing operations including branch management, commits, resolving merge conflicts, pulling and pushing updates, reviewing and approving pull requests, code integration, and managing project milestones and releases through Git tags.

#### **Optisoft Technologies(Onsite)** - Backend Developer

MARCH 2020 - JUNE 2021

- Developed server side components of client's web application using Python and Django. Designed single page applications using the React framework, implementing components, SwiperJS, states, Hooks, React-icons and others.
- Developed, scaled and implemented effective Restful API's, with other technologies for data flexibility and exchange between server and client side interface.
- Executed project architecture review, debugging operations and latency solutions to product development.

#### **EDUCATION**

**University of Benin** — Bachelor's degree in Chemical Engineering

APRIL 2012 - SEPTEMBER 2017

**Thesis** — Optimized Synthesis of Bioethanol from Cassava Bargasse.

- Pretreated biomass samples, carried out detoxification, hydrolysis, titration and fermentation.
- Prepared and monitored enzyme broth, carried out distillation and characterization of bioethanol.
- Validated mathematical models and process kinetics against experimental results, carried out simulation and optimization using AspenHYSIS, Design Expert(Response surface methodology).

## **Project** — <u>Design of 40,000 Tons Maleic Anhydride Process using Benzene as feedstock.</u>

- Conducted process simulation using Aspen HYSYS to achieve a 93.4% conversion of Benzene in the plug flow reactor.
- Carried out material balance of the process, determined the benzene feed requirement at 57.4kmol/hr to achieve the target production.
- Collaborated in evaluating the economic viability of the process using Aspen Process Economic Analyzer (APEA), calculated payback period (PBP) to be approximately 2 years, internal rate of return (IRR) of 55%, and EAOC of -\$77,549.17, indicating high profitability.

#### **PROJECTS**

<u>Tsap Project</u> (Python, Django, Javascript, HTML) - Collaborator - Ongoing.

<u>Tsap next Project</u> (React, Javascript, CSS) - Collaborator - Ongoing.

Blog X2D Application (Python, Django, MySQL).

<u>Drupal Ecommerce Application</u> (Python, Django, Restful API, SQLite, Payment Integration).

FullStack Hotel Web Application (Python, Django, Javascript, HTML & CSS) - Ongoing.

<u>Project Tracker Application</u> (React, Javascript, Swiper Js, Google fonts, CSS).