Itwela Ibomu

US Citizen | iibomu@wgu.edu | linkedin.com/in/linkedin.com/in/itwela | github.com/github.com/itwela

EDUCATION

Western Governors University (WGU)   Salt Lake City, UT
B.S. in Software Engineering   *December 2026 (Estimated)*
- Relevant coursework: Data Structures & Algorithms; Python; Front-End Web Development; JavaScript

EXPERIENCE

Software Engineer   Jul 2025 - Dec 2025
Dope Marketing   *Remote (HQ: Minnesota)*
- Built internal AI platform used by 3 managers to automate account research and data analysis.
- Created APIs granting agents instant access to millions of housing and client records, cutting manual lookup time from hours to minutes.
- Delivered 3 production tools adopted by management, enhancing research efficiency across departments.

Software Engineering Fellow   Jul 2024 - Sep 2024
Headstarter   *Remote (HQ: San Francisco, CA)*
- Led a team of 3 to build CitySwipe, an AI vacation planner with 200 users and 50K+ impressions.
- Won 1st place out of 300+ teams in a nationwide hackathon for innovation and product execution.
- Shipped 5 AI web apps using Next.js, LangChain, and Supabase; scaled multiple to 200+ users.

AI Engineer   Apr 2024 - Jun 2024
Dataforce   *Atlanta, GA*
- Reduced captioning error rates by 20% across 200 videos/day through workflow optimization.
- Improved data processing consistency and automated recurring QA checks for higher reliability.

Software Intern
J.P. Morgan (Forage)   *Remote*
- Built real-time data visualization tool (¡200ms updates) using the Perspective library.
- Gained exposure to enterprise-scale data systems and visualization workflows.

PROJECTS

Lotus — AI Wellness App | *React Native, Replicate, OpenAI, Convex*
- Built an iOS wellness app currently available on the App Store; API-driven, multimodal content generation pipeline.
- Built an API-driven agent pipeline to orchestrate LLMs and multimodal generators for automated title, content, audio narration, and image generation while enforcing the company's content and ethical guidelines.
- Produced audiobook narration used by my father; packaged audio + book bundles and generated five-figure revenue from album and book sales.
- Developed a monetization and pricing strategy by analyzing dozens of model cost/performance tradeoffs to ensure profitable unit economics.

Jelly Up! — Instant Video Caption Generator | *Next.js, Whisper, OpenCV, Docker, FFmpeg*
- Automated subtitles and burned-in captions with Whisper and OpenCV; judged 2nd place at Headstarter Hiring Hackathon.
- Architected an end-to-end automated captioning pipeline using Whisper for ASR and OpenCV for frame alignment, producing both SRT and burned-in captions.
- Improved caption sync and robustness by implementing frame-alignment heuristics and encoding automation for reliable demos.

Globetrotter AI — Voice Travel Assistant | *Flask, Python, OpenAI, Google TTS, React Three Fiber*
- Voice-activated travel planner integrating speech recognition and travel APIs.

- Built a voice-activated travel assistant integrating speech recognition, LLM planning, and third-party travel APIs to produce itinerary suggestions and spoken responses.

- Won 1st place at the Headstarter Hiring Hackathon for voice UX, API integrations, and production-ready demo.

CitySwipe — AI Travel Planner | *Next.js, LangChain, Pinecone, Supabase*

- Personalized travel recommendations via LLM + vector search.

- Designed personalized travel recommendation flows using LLMs plus vector search for context-aware suggestions; reached 200+ users and 50K+ impressions.

Job Tracker & Analytics Dashboard | *Next.js, PostgreSQL, Supabase*

- Automated job tracking workflow and analytics dashboard.

- Built an automated job-tracking and analytics dashboard that reduced application bookkeeping time by 50% through workflow automation and templated application generation.

RAG — AI "Rate My Professor" Chat App | *Next.js, TypeScript, Pinecone, OpenAI*

- Real-time RAG chat application using vector search for contextual answers.

- Implemented vector-search RAG architecture to serve real-time contextual answers and improve perceived answer relevance.

TECHNICAL SKILLS

Languages: LangChain, Python, TypeScript, React, Next.js, React Native, Node.js, PostgreSQL, Supabase, Docker, Pinecone, OpenAI, Convex, Replicate
Additional Skills: Prompt engineering, RAG / Vector Search, API design, Product Development, UI/UX Design, Agile, Leadership