

# Oluwasegun Adewola

[segunadewolai@gmail.com](mailto:segunadewolai@gmail.com) | 425-652-2931 | [segunadewola.github.io](https://github.com/segunadewola) | [linkedin.com/in/segunadewola](https://linkedin.com/in/segunadewola)

## EDUCATION

### Northeastern University

Sep. 2024 – May 2027

*Master of Science in Computer Science*

*Seattle, USA*

- GPA: 4.0, Global Learner Award
- People's Choice **Winner, Qualcomm & Microsoft Edge AI Hackathon (LLMConquest 4)**
- Relevant Coursework: Data Structures and Algorithms (C/C++), Object Oriented Design (Java), Discrete Math, Foundations of Computer Science (Python)

### Covenant University

Aug. 2017 – Aug. 2022

*Bachelor of Engineering in Electrical and Electronics Engineering*

*Ota, Nigeria*

## PROJECTS

### Astronoma (AI Space Education Platform) | *Python, React, Three.js, FastAPI, Llama 4 API* Jun. 2025 – Ongoing

- Co-architected full-stack educational platform with team using FastAPI and React with Three.js, enabling real-time 3D universe exploration through Llama 4-powered AI assistant for immersive space learning across 11 supported languages.
- Engineered real-time WebSocket communication and AI integration pipeline with custom Llama 4 API prompt engineering, implementing intelligent caching (1-hour TTL) and AWS Transcribe/Polly for voice-controlled navigation that processes natural language commands into 3D environments with 60 FPS rendering.
- Built procedural content generation system using PIL and NumPy for real-time texture creation, implementing asynchronous batch processing that reduces initial load time by 60% while generating scientifically accurate celestial object visualizations.

### LLMConquest 4 (Realistic Game AI Prototype) | *Python, Ollama, Mistral 7B, Whisper, PyQt* Mar. 2025 – Mar. 2025

- Won People's Choice Award at Qualcomm & Microsoft Edge AI Hackathon leading 5-person team to integrate Mistral 7B on Ollama for narrative-driven Connect Four with real-time conversational AI opponent.
- Implemented thermal-aware minimax algorithm with alpha-beta pruning and speech processing pipeline using OpenAI Whisper, reducing computational load by 50% during high temperatures through dynamic depth adjustment while enabling seamless voice gameplay with 16kHz audio capture and real-time transcription.
- Selected by Qualcomm and Microsoft judges post-hackathon to develop RPGMaster, an AI DungeonMaster experience inspired by Dungeons & Dragons, designed for next-gen Snapdragon X-Elite edge devices.

## EXPERIENCE

### Volunteer Python Instructor

Jul. 2024 – Aug. 2024

*Apps and Scripts (Coding Bootcamp for kids)*

*Ibadan, Nigeria*

- Designed and delivered an 8-week Python programming workshop to kids aged 8-15, achieving a 90% positive feedback rate.
- Developed interactive coding challenges and adapted teaching methods to different learning paces, addressing learning gaps and increasing final assessment average score by 18% YoY.

### Data Scientist, FX Pricing

Jan. 2023 – Aug. 2024

*Sendapp, Flutterwave (International Money Transfers to Africa)*

*Lagos, Nigeria*

- Developed Python-based FX rate tracker using Playwright and Requests enabling real-time competitor analysis, designed Power BI dashboards for real-time FX insights, reducing manual data collection time by 50% and increasing team productivity by 22%.
- Designed predictive pricing algorithms based on market trends and historical sales data in collaboration with cross-functional teams, leading to a \$150,000 revenue increase in the first month.
- Collaborated with core engineering teams to integrate pricing algorithms into the Consumer FX platform, enhancing data accuracy and price update speed, resulting in a 12% increase in pricing-related product activations.

### Sales Development Representative

Aug. 2022 – Dec. 2022

*Flutterwave (Scalable Payment Infrastructure for Africa)*

*Lagos, Nigeria*

- Leveraged analytical insights to identify high-conversion leads and automated lead tracking using Python scripts, driving 14% increase in conversion rates and 30% improvement in sales team productivity.

### Project Management Intern

May 2021 – Dec. 2021

*Mar & Mor Engineering Services*

*Lagos, Nigeria*

- Led design, testing and implementation of complex lighting and power circuits for company HQ and 6 high-priority projects concurrently, optimizing HVAC system shop drawings for ARK project (World's largest indoor arena) by 2.3%.

## LEADERSHIP

**National Society of Black Engineers (NSBE) – Member**

Sep. 2024 – Present

**Northeastern University Lead – Events Lead**

Jan. 2025 – Present

**Northeastern University GameCube – Design Lead**

Dec. 2024 – Present

## SKILLS

**Languages:** Python, Java, JavaScript, TypeScript, C, C++, Go, SQL, HTML/CSS

**Frameworks & Libraries:** React, Node.js, Three.js, FastAPI, SpringBoot, pandas, NumPy, PyTorch, LangChain, Socket.IO

**Tools & Databases:** Docker, Kubernetes, AWS, Google Cloud, Linux, GitHub, WebGL, MySQL, PostgreSQL, SQLite, MongoDB