Oluwole Fabikun

857-236-0685 | Boston, MA | wole359@gmail.com | wolefabikun.com | github.com/WoleFabikun

Education

University of Massachusetts-Amherst, Amherst MA   Expected Graduation: May '24
B.A. in Computer Science, Biology Minor

Related Courses: Algorithms, Data Structures, Advanced Computation, Database Management, Web Programming, Human-Comp Interaction, Data Forecasting, Computational Statistics
Leadership: National Society of Black Engineers Outreach Chair, Male Fashion Model Coordinator, Tutor, Substitute Teacher
Extracurriculars: ColorStack, HackUMass, UMass Brotherly Union, UMass Fashion Organization, Founder of Wole's Cuts

Skills

Languages: Python, Typescript, Java, SQL, HTML
Frameworks/Libraries: Express, NextJS, React, Node.js, Flask, Django, TailwindCSS, Qdrant
Tools: Git, Vercel, Postgres, Postman, Firebase, Figma, Railway, Redis

Experience

Software Engineer Co-op – Novy   Jan '24 – Present
Python, Typescript, NextJS, React, OpenAI, QDrant, Vercel, Railway, Redis
- Key contributor to the development of Paidleave.ai, a chatbot initiative in collaboration with Moms First and OpenAI, featured in Forbes, Time Magazine, and Fortune for simplifying New York's intricate paid leave policies, with ongoing expansion to 8 additional states and D.C.
- Engineered an automated testing framework to assess, benchmark, and refine the chatbot's responses, contributing to a measurable enhancement in user experience while prioritizing ethical AI use and user trust
- Implemented a hybrid search mechanism to supplement the retrieval-augmented generation, combining semantic search with metadata filtering, elevating the chatbot's understanding of inquiries, causing a 25% increase in average F1 score for accuracy

Software Developer – BUILD UMass   Aug '23 – Present
Python, Typescript, React, Django, Firebase, TailwindCSS
- Collaborating on a team of five to elevate the Amherst Ballet School website's functionality and user experience, focusing on modernizing online presence and improving user engagement
- Utilizing **Agile methodologies** such as **Scrum** standups and sprints, effectively maneuvering through technical complexities, ensuring steady progress, and adherence to project timelines

Software/Data Research Intern – Laboratory for Advanced System Software   Sep '22 – Present
Python, Typescript, NextJS, Flask, Express
- Spearheading a research initiative focused on the implementation of **computer vision** techniques for over **90%** accuracy in identifying solar potential of roofs
- Creating solar energy generation applications to enhance data visualization, user interaction, and optimize research efficiency

Developer Intern – Nucor Skyline   Jun '23 - Aug '23
C#, Power BI, Salesforce API, Azure DevOps, Freshservice
- Designed and implemented a secure **RESTful API** using **ASP.NET** core, enabling **JWT token**-based user authentication and authorization, while collaboration with team members to integrate the API into the project ecosystem
- Optimized data retrieval pipeline, through seamless integration between Salesforce and Power BI, for improved business insight efficiency
- Developed a dynamic credit Dashboard that enabled real-time visualization of quote data, leading to a **20%** improvement in sales analysis accuracy and empowering daily data-driven decision-making

Projects

Green Thumb Drive (Plant Care Application)   Mar '24 - Current
- Developing a full-stack application using **Next.js**, **TypeScript**, **Flask**, and VideoDB to provide personalized plant care advice and video recommendations
- Implementing a Retrieval-Augmented Generation (**RAG**) pipeline using LlamaIndex to enable **semantic search** and retrieval of relevant video content based on user queries
- Utilizing **Bun**, a high-performance JavaScript runtime, to significantly improve application performance, reduce build times, and enhance the overall development experience

Personal Portfolio Website   Aug '23
- Engineered a dynamic personal portfolio website using **React**, **Tailwind CSS**, and modern web development practices
- Leveraged **server-side rendering** and **markdown components** to ensure performance and SEO friendliness
- Created an intuitive and visually appealing user interface with a mobile-responsive design