Timothy Medewase

medewaset@gmail.com | linkedin.com/in/timothy-medewase | github.com/TimothyMedewase | timothy-medewase.com

EDUCATION

University of Montevallo

Montevallo, AL

Honors Bachelor of Science in Computer Science, Minor in Mathematics

Aug. 2021 - May 2025

Relevant Coursework: Introduction to Computer Science, Introduction to Data Analytics & Computing, Computer Programming I (Python), Object-Oriented Programming (OOP), Calculus I, II, III, Data Structures and Algorithms, Database Management Systems, Operating Systems, Computer Networks, Programming Languages, Software Engineering

TECHNICAL SKILLS

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

Frameworks & Libraries: Spring Boot, Maven/Gradle, React, Redux, Node.js, Next.js, Express.js, Vite, Jest, d3.js, recharts, Django, Flask, FastAPI, Pandas, NumPy, Celery, TensorFlow, PyTorch, Scikit-learn, Material-UI, TailwindCSS Tools, Databases & Deployment: Git, GitHub, Bitbucket, LaTeX, Prisma, SQLAlchemy, SQLite, PostgreSQL, MySQL, Microsoft SQL Server, MongoDB, REST APIs, GraphQL, Docker, AWS, Heroku, Vercel

EXPERIENCE

Software Development Intern

May 2023 - Jul. 2023

Solera, Inc.

Westlake, TX

- Designed and delivered a full-stack analytics platform using **React** and **d3.js**, building modular, component-based data visualizations that improved user engagement by **30%** and reduced feature development time by **40%**.
- Engineered high-performance backend data workflows with Microsoft SQL Server, optimizing stored procedures
 and query execution to reduce data retrieval latency by 50% while ensuring consistency across services packaged in
 Docker containers.
- Integrated RESTful API endpoints using **Axios** and automated CI/CD pipelines with **Bitbucket**, streamlining deployment, reducing integration bugs by **40**%, and increasing deployment frequency to support real-time, data-driven insights for stakeholders.

PROJECTS

ExplainAI | Next.js, Python, FastAPI, FAISS, OpenAI, Heroku | Link

Apr. 2025

- Built a retrieval-augmented generation (RAG) web app, improving information retrieval by 40% over traditional methods with a Next.js frontend and Python-based FastAPI backend.
- Implemented secure file handling for five concurrent uploads and integrated FAISS with the OpenAI API to enable fast semantic search, cutting query latency by 60%.
- Developed modular **React** components and deployed APIs on **Heroku** with **99% uptime**, supporting a scalable user experience and handling **50%** more user traffic without performance loss.

Movie Management System | Java, Spring Boot, Spring JDBC | Link

Nov. 2024

- Managed a 10,000-entry database, applying OOP principles and a layered architecture for maintainability and scalability.
- Improved backend development using Spring Boot, reducing setup time by 40% with auto-configuration and decreasing query code via Spring JDBC.
- Accelerated data processing speed by 20% through efficient in-memory handling with Java Collections and implemented complete CRUD operations.

Buy-N-Sell | Next.js, React, Prisma, PostgreSQL, Stripe | Link

May 2024

- Launched an e-commerce platform that improved engagement by 30% using Next.js and React to build core features for a seamless UI/UX.
- Developed an admin dashboard to manage inventory, boosting backend efficiency by 50% and ensuring data consistency through refined CRUD workflows.
- Integrated **Stripe** to process multiple concurrent transactions with a **100%** success rate and optimized database access via **Prisma** and **PostgreSQL**.

SPAZ | Next.js, React, TypeScript, TailwindCSS, Spotify | Link

Feb. 2024

- Boosted user return rate by 45% by delivering personalized Spotify insights through large-scale listening history analysis using Next.js, React, and TailwindCSS.
- Fetched multiple data points per user with the **Spotify API** and implemented **OAuth 2.0** for secure data access and privacy compliance.
- Increased engagement by 60% with interactive visualizations of listening trends, achieving a perfect 100% Lighthouse performance score.