Niyaz Nabi

Phone: (940) 300-9580 Email: niyaznabi6@gmail.com LinkedIn: linkedin.com/in/niyaz-nabi GitHub: github.com/nabi06
Website: niyaznabi.tech

Professional Summary

Aspiring data scientist with a robust foundation in full-stack development and data analytics, pursuing a Master's in Advanced Data Analytics. Skilled in Python, SQL, and modern web technologies, with a proven track record of building scalable applications and optimizing data-driven solutions. Seeking to apply advanced analytical expertise to solve complex, real-world challenges.

Education

University of North Texas

Master's in Advanced Data Analytics *GPA: 4.0/4.0*
Relevant Coursework: Software Engineering, Web Development, Database Management Systems (DBMS)

Gitam University

Bachelor's in Computer Science *GPA: 8.68/10 (equivalent to 3.5/4.0)*
Relevant Coursework: Data Analytics, Data Harvesting, Storage, and Retrieval, Application Deployment

Technical Skills

Programming Languages: Python, SQL, JavaScript, TypeScript, C

Web Technologies: HTML5, CSS, React.js, Next.js, Vue.js, Node.js, Express.js, Flask

Databases: PostgreSQL, MongoDB, SQLAlchemy

Tools: Git, Postman, Power BI, Tableau, SAS, Excel, Canva, Webflow, Hadoop, Hive, AWS

Work Experience

University Of North Texas **May 2025 – Present**

Research Assistant *US*

- Developed MathRAG, an **intelligent mathematics learning platform that leverages Retrieval-Augmented Generation (RAG)** to provide accurate and contextually relevant answers to mathematical queries.
- Engineered a **production-grade application with FastAPI backend and Next.js frontend, implementing a sophisticated RAG pipeline** that retrieves relevant mathematical content before generating responses.
- Implemented a robust chat interface with **real-time streaming responses using Server-Sent Events (SSE),** allowing users to receive information as it's generated rather than waiting for complete responses.
- Designed a scalable **database architecture using MongoDB for vector storage and retrieval, enabling efficient semantic search** across mathematical content.Deployed the application on a dedicated server with proper **containerization, ensuring reliability and consistent performance** without reliance on cloud providers.

Solutions Now **January 2025 – May 2025**

Data Analyst Intern *US*

- Designed and implemented **scalable data ingestion pipelines using Python (Pandas, NumPy)**to process and **clean streaming, unstructured data, enabling real-time analytics** and improving data quality by 35%.
- Developed dynamic data visualizations with **Tableau and SnowFlake, leveraging**, real-time data streams from ingestion pipelines to effectively communicate trends and insights to stakeholders.
- Optimized **Python-based data pipelines for efficient handling of high-velocity streaming data, reducing processing latency** and ensuring seamless integration with downstream visualization systems.

Vertocity **July 2022 – August 2024**

Software Development Engineer (SDE) *India*

- Designed and developed a **SaaS product** and **full-stack applications** for **data science** initiatives, delivering **modular** and **maintainable code** that significantly reduced development time.
- Enhanced frontend responsiveness and backend **scalability** using **Next.js**, **TypeScript**, **JavaScript**, **Tailwind CSS**, and **Express.js**, leading to a **40%** improvement in application performance.
- Optimized data usage and application performance through efficient **data structures**, **object-oriented programming**, **DOM manipulations**, and **RESTful APIs** built with **Flask**, resulting in a more efficient system.

Projects

Realtime Chat Engine **WebSockets, Redis, Node.js, Express.js, React.js**

Scalable Real-Time Communication Platform

- Developed a **scalable chat application** using **WebSockets** and **Redis Pub/Sub**, enabling real-time messaging across multiple servers.
- Implemented **horizontal scalability** by deploying multiple **WebSocket servers**, ensuring seamless communication even under high traffic loads.
- Utilized **React.js** for the frontend to provide a responsive and interactive user interface, enhancing the overall user experience.

Traffic Crash Analysis **Hadoop, Apache Spark, PostgreSQL, GCP, BigQuery, OpenRefine**

Traffic Crash and Vehicle Insights Project

- Analyzed **real-time** and **historical** traffic crash data to identify patterns and high-risk zones, leveraging **Hadoop** and **Apache Spark** for processing and **PostgreSQL** for storage.
- Utilized **GCP**, **BigQuery**, and **OpenRefine** for data preprocessing, querying, and visualization, delivering **actionable insights**.