

Akash Sureshkumar

Mobile Number: 716-709-0514 | Email: asureshk@buffalo.edu

LinkedIn: www.linkedin.com/in/akash-sureshkumar/

Programming Languages: Python, R, Java, JavaScript, MySQL

SUMMARY

Data Science graduate student with 2.5 years of experience as a backend developer, specializing in building scalable APIs and transitioning systems to microservices using Java and Spring Boot. Proficient in Python, SQL, and cloud technologies, with hands-on experience in Agile environments.

SKILLS

Technical Skills: AWS, Jupyter Notebooks, TensorFlow, Tableau, Power BI, MySQL, PostgreSQL, Git, Bootstrap, ETL, SoapUI, Postman, Agile, Spring Boot

Soft Skills: Creative Problem-Solving, Effective Communication, Self-Motivation and Adaptability, Collaboration and Teamwork, Analytical Thinking

EDUCATION

Master of Engineering Science in Data Science

University at Buffalo | Buffalo, New York | **August 2024 – December 2025**

Course: Probability Theory, Numerical Mathematics, Programming Fundamentals, Database Query Languages, Machine Learning, Statistical Learning, Data Mining, Industry Applications

Bachelor of Engineering in Computer Science Engineering

Sri Sairam Engineering College | Chennai, India | **August 2018 - June 2022**

Course: Data Structures, Algorithms, Database Management, Object-Oriented Programming, Software Engineering, Machine Learning, Operating Systems

WORK EXPERIENCE

Software Engineer

Guardian India Operations Private Limited | Chennai, India | **April 2022 – August 2024**

- Developed high-performance REST APIs using **Java** and **Spring Boot**, improving system efficiency by 30%, and transitioned legacy systems to a **microservices architecture**, increasing deployment speed by 40%.
- Achieved 95% test coverage and reduced production errors by 20% by constructing backend APIs with **JUnit** and **Mockito**, ensuring robust testing and system stability.
- Optimized database performance with **DB2** and **SQL Developer**, reducing query execution time by 15%, enabling faster data retrieval and streamlined PDF generation for underwriting tasks.
- Implemented real-time monitoring dashboards using **AWS CloudWatch** and **Splunk**, cutting incident response time by 50%, and strengthened caching with **Redis**, decreasing server load by 35% during peak traffic.

PROJECTS

Trading Assist Application for Stock Market

Technologies: R, TensorFlow, Keras, quantmod, ggplot2 | **December 2024**

- Built a stock prediction system using **LSTM** models, achieving 97.61% accuracy and 2.39% MAPE, while streamlining data preprocessing with **TensorFlow** and **Keras** to improve training efficiency.
- Integrated live financial data streams using **quantmod** and designed dynamic visualizations with **ggplot2**, increasing decision-making efficiency by 25% and enabling real-time financial insights. Predictive Analytics for Diabetes

Predictive Analytics for Diabetes

Technologies: Python, SQLite, Docker, Streamlit (Frontend), Digital Ocean (Backend server) | **December 2024**

- Developed a predictive analytics model utilizing **Logistic Regression**, **Random Forest**, and **Gradient Boosting**, ensuring dependable accuracy and optimized model performance through efficient data pipelines with **Pandas**, **NumPy**, and **scikit-learn**.
- Deployed scalable machine learning models using **MLflow** and **Joblib**, reducing deployment time by 40%, and enhanced real-time healthcare insights with a 30% improvement in response efficiency.