

SATYA SAI VARUN BADIREDDI

602-691-8205 • sbadired@asu.edu • LinkedIn • GitHub

SUMMARY

Software Engineer with 2+ years of experience designing scalable full-stack applications using Node.js/NestJS, Angular, and Spring Boot. Skilled in event-driven and microservices architectures with expertise in message queues, streaming systems, caching, and cloud-native deployments using Docker and Kubernetes.

EDUCATION

Master of Science - Computer Software Engineering May 2026
Arizona State University, Tempe, AZ 3.97 / 4

Integrated Dual Degree (B.Tech + M.Tech) July 2017 - May 2022
IIT (BHU), Varanasi, India 8.24 / 10

TECHNICAL SKILLS

Languages: Java, JavaScript, TypeScript, SQL

Frameworks & Technologies: Spring Boot, WebFlux, Angular, Node.js (NestJS, Express), React, REST APIs

Cloud & DevOps: Docker, Kubernetes, AWS (Lambda, S3, EC2, ECS, SQS, CloudWatch), Jenkins, GitHub Actions

Databases & Tools: PostgreSQL, MySQL, MongoDB, Redis, Kafka, Neo4j, JUnit, Mockito, Git

PROFESSIONAL EXPERIENCE

CarDekho, Gurugram, India: Software Engineer July 2022 - Aug 2024

- Built a self-serve seller platform for bid management, account updates, and payments, serving **10K+ sellers** and reducing support dependency by **70%**.
- Automated vehicle auction, inspection, and payout workflows by developing backend services and integrating payment systems, improving processing throughput by **40%** while reducing operational errors by **25%**.
- Developed scalable applications using **Angular, NestJS, microservices, and REST APIs**, integrating **Redis caching** and **AWS Lambda with SQS** to build reliable event-driven workflows.
- Built and maintained **CI/CD pipelines** using **Jenkins** with automated testing, enabling reliable deployment of backend services on **AWS EC2**.
- Collaborated with cross-functional teams to design scalable features, troubleshoot production issues, and improve performance across seller and auction management services.

PROJECTS

Anime Recommendation Platform

- Built a full-stack anime recommendation platform using **React** and **Spring WebFlux**, developing scalable non-blocking **REST APIs** with **JWT authentication**.
- Designed a **Kafka-based event-driven pipeline** with **Redis caching** to support asynchronous recommendation processing and improve response performance.
- Developed a content-based recommendation engine using genre and text similarity, integrating **PostgreSQL** and deploying containerized microservices using **Docker** and **Kubernetes**.

Large-Scale Graph Data Analytics Pipeline

- Designed and implemented a scalable graph analytics pipeline using **Neo4j Graph Data Science (GDS)** to analyze large-scale trip and location datasets with graph algorithms including **BFS** and **PageRank**.
- Built containerized data ingestion and transformation workflows using **Docker** to process high-volume parquet datasets into graph-based models.
- Extended the architecture with **Apache Kafka** for streaming ingestion and orchestrated distributed services using **Kubernetes (Minikube)**, deploying Neo4j, Kafka, and Zookeeper for scalable processing.

Depression Risk Prediction

- Built an end-to-end machine learning pipeline using **Python** and **scikit-learn**, performing data preprocessing, feature engineering, and imbalance handling.
- Trained and evaluated **Logistic Regression, Random Forest, and Gradient Boosting** models with a **soft-voting ensemble** for predictive analysis.
- Optimized model performance for Recall and F1-score, achieving **94% accuracy** with an **F1-score of 0.82**.