

Sai Kumar Challagundla

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Professional Summary

Full Stack Engineer with experience building **scalable, distributed systems** in cloud-native environments. Strong background in **microservices architecture, API design, and system design** using Node.js, TypeScript, and React. Experienced with **event-driven systems**, containerized deployments on **Azure AKS**, and performance optimization across high-traffic production systems. Proven collaborator in Agile teams delivering reliable, data-driven solutions.

Skills

Languages: JavaScript (ES6+), TypeScript, Java, Python, SQL (PostgreSQL, MySQL), HTML/CSS

Technologies & Tools: MERN Stack (MongoDB, Express, React, Node.js), Redux Toolkit, Microservices Architecture, RESTful APIs, Azure (AZ-104), Docker, Kubernetes (AKS), Kafka, Redis, Git

Work Experience

Walmart, Remote (US)

Mar 2024 – Present

Full Stack Engineer

- Engineered scalable microservices using Node.js and TypeScript, implementing event-driven communication via Kafka to manage inventory updates across **4,000+ stores**.
- Migrated legacy modules to PostgreSQL, applying advanced indexing and partitioning to improve query performance by **40%**.
- Built high-performance frontend interfaces using React.js and Redux Toolkit, reducing checkout bounce rates by **12%**.
- Deployed containerized applications on Azure AKS, ensuring reliable transaction storage and **ACID compliance**.
- Contributed to system design reviews and code reviews to improve service scalability and maintainability.
- Collaborated with product and QA teams to deliver production-ready features under tight timelines.

Swiggy, Bangalore, India

Feb 2021 – Jun 2023

Software Development Engineer

- Designed and developed **RESTful backend services** using Express.js and MySQL, supporting **500k+ concurrent requests**.
- Improved API performance by implementing **Redis-based caching**, reducing database load by **60%**.
- Led migration to a **micro-frontend architecture** using React, enabling independent deployments and reducing build times by **25%**.
- Built and maintained Instamart features using MongoDB-backed services while ensuring **data consistency** via SQL transactions.
- Partnered with senior engineers to debug production issues and optimize high-traffic backend workflows.
- Owned features end-to-end, collaborating with product, QA, and operations teams through production release and support.

Project Work

- Cloud-Based Remote Code Execution Engine:** Built a secure full-stack code execution platform using Node.js, React, and Monaco Editor with isolated execution environments.

Certifications

Microsoft Certified: Azure Administrator Associate (AZ-104)

Education

Saint Louis University, MO, USA — Master of Science in Computer and Information Science May 2025