

Raviraj Indraganti

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EDUCATION

Master of Science in Software Engineering, San Jose State University Aug 2022 - May 2024
Relevant Coursework: Distributed Systems, Enterprise Application Development, Web UI Designing, Cloud Computing, Software Platforms, Software Systems Engineering and Processes, Data Mining, Design Patterns.

Bachelor of Science in Computer Science, SASTRA University Jul 2017 - Jun 2021
Relevant Coursework: Data Structures, Object Oriented Programming(OOP), Operating Systems, Database Management, Algorithms, Computer Networks, Machine Learning, Parallel and Distributed Systems, Big Data, Linux Programming.

EXPERIENCE

Software Engineer Jul 2021 - Jun 2022
Appviewx *Bangalore, India*

- Collaborated with a team of 6 and engineered Cloud Connector to migrate Appviewx as a multi-tenant SaaS, using **Java, Spring Boot, Kafka** which increased sales by 35%.
- Created Cloud-DC leveraging AWS, MongoDB, **Microservices**, Kubernetes slashing cloud resource usage by 40%.
- Leveraged **multi-threading** to monitor health of Cloud-Connectors using **SocketIO, Redis**, cron job.
- Designed and integrated 15+ **REST APIs** to Cloud-Connector, collaborated with QA team to ensure reliability.

Software Engineer Intern Feb 2021 - Jul 2021
Appviewx *Coimbatore, India*

- Engineered prerequisite feature which automated 8+ compatibility tests using **Linux Scripting, Spring Boot**.
- Developed **responsive** Cloud-DC page using **React** and optimized using **pagination** to reduce loading speed by 20%.
- Leveraged **TDD principles** in creating 25+ unit tests using Mockito, Junit, Object-Oriented Programming.

SKILLS

Programming Languages	Java, JavaScript, TypeScript, C++, Python, Go
Databases	PostgreSQL, MongoDB, Redis, MySQL, DynamoDB
Technologies/Frameworks	REST, gRPC, GraphQL, Web Sockets, SpringBoot, Flask, Node.js, Express.js, Terraform, React, Spark, Kafka, Docker, Kubernetes, Jenkins, Jackson, JUnit, Mockito, Hibernate
Tools	Git, Maven, Gradle, JMeter, Postman, AWS, GCP, log4j, IntelliJ, WebStrom, PyCharm

PROJECTS

CanvasCatalyst - a plugin for open-source Canvas LMS Dec 2023

- **Skills: SpringBoot, Spark, Canvas API, multi-threading, Redis, JWT Authentication, AWS.**
- Collaborated with a team of 3 to developed a microservice to compare metrics of students using **Spark, PostgreSQL, Canvas API** and provided campus resource recommendations to student to improve grades by 20%.
- Engineered mastery-grading system to automate letter-grade generation of 5+ grading schemes using Java, React.
- Integrated OAuth and **JWT authentication** to ensure security and safe handling of sensitive data.

Traffic Violation Repository - a Distributed System May 2023

- **Skills: Distributed Systems, ETL, Raft Consensus, Java, SpringBoot.**
- Designed a distributed system to handle 40GB of traffic data using **gRPC** and a mesh topology, achieving enhanced system scalability and interoperability.
- Implemented a data replication mechanism with a factor of 2 using ZooKeeper and **Raft**, achieving high consistency.
- Developed a query processing module with custom time attribute indexing using distributed query execution, achieving a 40% improvement in search response times.

IoT & Smart Meter Management System Dec 2022

- **Skills: ReactJS, Java, Spring Boot, Cassandra, MySQL, AWS, Docker, Kubernetes, REST APIs, Kafka.**
- Led a team of 4 to design and develop a SaaS multi-tenant platform using **React, Java** to manage **IoT** devices.
- Implemented **CRUD** operations for the devices and a user-friendly interface using **React, MySQL, GraphQL** and integrated billing, payment and analytics services using **microservices**.
- Employed **AWS Load Balancing**, AWS CloudWatch, AWS EC2, Auto Scaling, AWS S3 to achieve high reliability.

LEADERSHIP

President - Math Club@SASTRA, a club for conducting Math related events and **problem-solving**. Jan 2018 - May 2021

Head of Telugu Sahithi Samithi, SASTRA University, a cultural club for Telugu-speaking people. Jan 2020 - May 2021