

Mohammed Ilyas Ahmed

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EDUCATION

San Jose State University

Aug 2022 - May 2024

Master of Science in Software Engineering (GPA: 3.66 / 4.00)

San Jose, CA

Relevant Courses: Enterprise Software, Web Development, Cloud Technologies, Data Mining, Business Intelligence

WORK EXPERIENCE

San Jose State University

Jan 2023 – Present

Instructional Student Assistant

San Jose, CA

- Designed curriculum, conducted lectures, facilitated discussions, graded and delivered course materials.

Tata Consultancy Services (Dow Chemicals)

Jan 2021 – July 2022

Software Engineer

Hyderabad, India

- Developed "Credit Insights", a robust and persistent application, to support Dow Chemical's IT Governance team.
- Employed a tech stack including **React.js**, **Docker**, and **AWS EC2 Microservices** to streamline credit limit tracking across various currencies.
- Designed a user-friendly customer portal that seamlessly integrates **React** front-end components with **Express.js** and **MongoDB** through RESTful APIs, providing clients with an organized overview of their account portfolios.
- Implemented rigorous **ES6** lint checks, resulting in a significant 90% reduction in code violations, thus improving overall code quality. The project followed Agile methodologies and used **JIRA** for task management.
- Enforced minimum unit test coverage using **Jest**, significantly boosting the overall test coverage by an impressive 75%. This approach ensures code robustness and reliability.

Tata Consultancy Services

Sept 2020 – Dec 2020

System Engineer Intern

Hyderabad, India

- Created several pipelines to automate multiple tasks and processes such as war file backup on cloud, builds, and deployments, reducing time consumed by about 80%.
- Developed a DevOps Dashboard using **Node.js**, **React**, and **MySQL** to monitor pipelines, analyze builds and deployments across all servers, and catch critical errors efficiently.
- Managed and configured several **AWS EC2** based instances and services such as **AWS S3**, **DynamoDB**, & **ELB**.
- Configured, deployed, and managed an event-based application leveraging **Kubernetes**, **Terraform**, **Docker**, and **Jenkins** on **GCP** for an internal project. Automated deployment in Kubernetes cluster whenever a new commit is made in **Git** using **Jenkins Groovy pipeline**.

PROJECTS

Health Club Management System | MERN Stack, AWS ELB

[🔗 Link](#)

- Developed a Gym Management System using React and NodeJS, increasing operational efficiency by 20%.
- Achieved 98% user satisfaction through real-time AWS and MongoDB analytics integration for data management.

Robot Management System | Angular, MongoDB, NodeJS, AWS EC2

[🔗 Link](#)

- Enhanced user engagement by 35% through an intuitive user dashboard for robot selection and simulation.
- Implemented AWS CloudWatch for real-time AWS Robomaker monitoring, reducing downtime by 20%.

Software QA Testing for Mobile Applications | Java, Selenium, AI Testing

[🔗 Link](#)

- Led cross-functional team to evaluate 4 AI food recognition apps, achieving an 82% pass rate in 200 test cases.
- Documented 27 critical bugs, improving app accuracy under diverse conditions for enhanced user experience.

TECHNICAL SKILLS

Programming Languages: Python, Java, C/C++, JavaScript, .NET, Go

Backend Technologies: NodeJS, ExpressJS, MongoDB, Rest APIs, DOM manipulation, Apache Tomcat

Front end and Containerization: ReactJS, Angular, Docker, Kubernetes, AWS, Git, Shell Scripting, HTML, CSS, Bootstrap

Big Data and Machine Learning: Pandas, Pig, Redis, Hadoop, Hive, Spark, Elastic Search, TensorFlow

Database: MySQL, MongoDB, Dynamo DB, S3, PostgreSQL