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, Cloud & Virtualization 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 CRUD 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