

Mohammed Ilyas Ahmed

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EDUCATION

San Jose State University, San Jose, USA

Aug 2022 – May 2024

Master of Science in Software Engineering

Current GPA: 3.45

Jawaharlal Nehru Technological University, Hyderabad, India

Jun-2016 – Sep 2020

Bachelor of Technology in Computer Science & Engineering

SKILLS

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

Backend Technologies: NodeJS, ExpressJS, MongoDB, Mongoose, 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, Relational Databases

WORK EXPERIENCE

San Jose State University, San Jose, California

Jan 2023 - Present

Instructional Student Assistant – CMPE 287: Software Quality Assurance and Testing

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

Tata Consultancy Services, Hyderabad, India

Associate Software Developer

Feb 2021 - Jun 2022

- Developed high-performance **MERN** stack applications with a focus on Domain and Test-Driven Development.
- Led a project migrating from monolithic to microservices, reducing infrastructure costs by **50%**.
- Designed and effectively implemented **RESTful APIs**, resulting in a substantial **25%** boost in data efficiency.
- Implemented authentication and authorization, enhancing security and reducing unauthorized access.
- Utilized **MongoDB** for database design, schema creation, and data modeling across **7** projects.
- Optimized applications for enhanced performance and scalability, leading to a **30%** decrease in page load times.
- Utilized **Kubernetes** for efficient container orchestration, ensuring seamless application deployment and scaling.

Web Tek Labs, Hyderabad, India

Sep 2020 - Dec 2020

Software Engineering Intern

- Developed a management and administrative console for an internal React-based application using **AWS Lambda**, **S3**, and **DynamoDB**. This innovation not only improved employee productivity by optimizing resource usage but also laid the groundwork for enhanced scalability.
- Collaborated cross-functionally to gather requirements, resulting in a user-centric design and a **20%** improvement.

PROJECTS AND PUBLICATIONS

Health Club Management System (React, MongoDB, NodeJS, AWS) - [GitHub](#)

Apr 2023

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

Robot Management System (Angular, MongoDB, ExpressJS, AWS) - [GitHub](#)

Dec 2023

- Enhanced user engagement by **35%** via an intuitive user dashboard for robot selection and simulation.
- Reduced downtime by **20%** using **AWS CloudWatch** for real-time **AWS Robomaker** monitoring.

Software QA Testing for Mobile Application (Java, Selenium, AI testing) - [GitHub](#)

Dec 2022

- Led cross-functional team, evaluated **4** AI food recognition apps, achieved **82%** pass rate in **200** test cases.
- Documented **27** critical bugs, improving app accuracy under diverse conditions and improved its accuracy.

Recognition of Handwritten Digits (Python, ML, Data Visualization) - [GitHub](#)

May 2022

- Utilized **SVM** and **CNN** to achieve a global accuracy of **93.043%** for classifying Handwritten Digits.
- Trained a model for banks and postal services using the MNIST dataset with **70,000** handwritten digits.

Published Research Paper Website link: <https://ijariie.com/FormDetails.aspx?MenuScriptId=201755>

CERTIFICATIONS AND LEADERSHIP POSITIONS

- Worked as Chief coordinator for CMPE department at ISO - SJSU
- AWS Certified Cloud Practitioner

- San Jose State University

- Udemy