

# Sayeera Shaik

## Software Engineer

My areas of expertise as a seasoned software engineer are API integration, performance optimization, and full-stack development. Along with a solid foundation in agile approaches, my technological knowledge includes Python, Java, JavaScript, Angular, Docker, and MongoDB. I thrive in dynamic environments, delivering efficient and reliable solutions with a commitment to excellence.

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## EDUCATION

### Master's in Computer Science University of Missouri Columbia

08/2022 - Present

Columbia, MO

DAA2, DATA Science, Supervised/Unsupervised Learning

- Single cell protein analysis

## WORK EXPERIENCE

### Graduate Student Assistant University of Missouri

10/2022 - Present

Columbia, MO

Achievements/Tasks

- Developed a React based web app with custom workflow integrating Python, R and cloud-based services for single-cell data analysis aiding the research community, and deployed in AWS EC2.
- Developed REST APIs in Flask and integrated in MongoDB improving the response time by 60%.
- Used version control systems like git for collaborative and efficient code management. Integrated the application with an MSSQL server utilizing MySQL database, enhancing data retrieval speed by 25% and ensuring 79.9% uptime.
- Containerized workflows with docker, ensuring 40% reproducibility and seamless deployment.
- Developed a full-stack website using Django to provide analysis of N-rate for crop production, improving data processing efficiency by 30%.

### Associate Software Engineer TATA CONSULTANCY SERVICES

05/2019 - 07/2022

Hyderabad, IND

Achievements/Tasks

- Developed and rigorously tested RESTful APIs for banking systems, using test-driven development methodologies in an agile team environment.
- Contributed to API documentation and testing, resulting a 30% decrease in defects. Integrated Structured Financial Message Systems (SFMS) with Tomcat, MYSQL, JSP and core Java.
- Enhanced intra/inter-bank communication, supporting NEFT and RTGS. Optimized SFMS messaging, reducing latency by 40%. Proficient in Core Java, JDBC, MySQL and Oracle for application development and troubleshooting.

## SKILLS



## PERSONAL PROJECTS

### Single cell protein analyses

- Developed a web application for single-cell protein analysis to enhance the understanding of protein functions and interactions at the cellular level.

### N-rate analyses

- Developed a web application to analyze and enhance nitrogen (N) fertilizer recommendations for crop production, incorporating advanced soil health measurements and biological nitrogen efficiency enhancers.

### P3DB

- Developed a protein structure analysis application using Angular to enhance visualization and understanding of protein interactions.

### SFMS

- Developed and maintained an SFMS (Structured Financial Messaging System) project for the Reserve Bank of India using Java for backend logic, SQL for database management, and Tomcat for web server deployment.

## ORGANIZATIONS

### Institution of Electronics and Telecommunication Engineers (IETE) (08/2015 - 05/2019)

Engaged in professional development activities and attended technical seminars.

## CERTIFICATES

### Microsoft Machine learning certification

### AWS Developer Associate

Undergoing process that includes understanding core AWS services such as EC2, S3, DynamoDB, Api Gateway, and others.