



# MOHAMMED SAAD FAZAL

📍 Bengaluru, India 📩 mdsaad7803@gmail.com ☎ +91 96573657248 ☎ +91 8296712616 🔗 Portfolio 💬 msaadf 💬 MdSaad07

## Summary

Detailed-oriented and motivated Software Engineer with experience in backend development, full-stack solutions, cloud computing, and AI. Skilled in building secure, scalable, and accessible applications, with a special focus on healthcare-related software such as assistive chatbots and patient data systems. Passionate about delivering robust solutions aligned with business goals and user experience. Open to relocation to Saudi Arabia.

## Education

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| <b>B.Tech Dayananda Sagar University</b> , Computer Science and Engineering  | <b>Oct 2021 – Jun 2025</b> |
| <ul style="list-style-type: none"><li>CGPA: 7.30/10 (<a href="#">Provisional Degree Certificate</a>)</li><li>Relevant Coursework: Data Structures, DBMS, Operating Systems, Software Engineering, Distributed Systems, Machine Learning for Healthcare</li></ul> |                            |
| <b>12th The Oxford Senior Secondary School</b> , Bengaluru, India  | <b>Jun 2020 – May 2021</b> |
| <ul style="list-style-type: none"><li>Stream: Physics, Chemistry, Mathematics, Computer Science</li><li>Board: CBSE</li></ul>  |                            |
| <b>10th International Indian School Dammam</b> , Ad Dammam, Saudi Arabia   | <b>Jun 2018 – May 2019</b> |
| <ul style="list-style-type: none"><li>Board: CBSE</li><li>Completed foundational studies in Science and Mathematics</li></ul>  |                            |

## Experience

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|---|------------------------------|
| <b>Software Engineer Intern</b> – ThamZeal International LLP (Thrissur, Kerala)   | Remote                       |
| <ul style="list-style-type: none"><li>Built and maintained RESTful APIs using Node.js and Express.js for scalable applications.</li><li>Developed frontend components using React, Next and integrated them with backend services.</li><li>Integrated MySQL and Wasabi cloud storage for secure data handling.</li><li>Debugged full-stack services and improved reliability with CI/CD pipelines.</li><li>Collaborated with international Agile teams to deliver cloud-native platforms.</li></ul> | Mar 2025 – Present           |
| <b>Data Science Intern</b> – CodeClause   | Bengaluru, India             |
| <ul style="list-style-type: none"><li>Developed Python scripts for preprocessing, model training, and analytics.</li><li>Built predictive models with Scikit-learn and visualized patterns using Matplotlib.</li><li>Debugged and optimized execution pipelines for performance improvements.</li></ul>   | Oct 2024 – Nov 2024          |
| <b>Web Developer Intern – addiT Labs, Bengaluru, India</b>  | August 2023 – September 2023 |
| <ul style="list-style-type: none"><li>Developed responsive and scalable web applications using React.js, JavaScript, and CSS.</li><li>Debugged front-end and back-end issues, ensuring seamless user experience.</li><li>Integrated REST APIs and optimized client-server communication.</li><li>Worked with Git, Postman, and UI frameworks for development and testing.</li><li>Assisted in UI/UX testing and debugging across development cycles.</li></ul>                                      |                              |

## Publications

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| <b>SilentCare: A Trust-Aware and Explainable AI Companion for Mental Health Support Through Adaptive Multichannel Dialogue Management - Accepted for publication, Paper ID: ICCES-005</b> | 2025 |
|---|------|

Md. Saad Fazal, Md. Kaifulla Kazim, Md. Fauzaan Zaki Meccai, Md. Armaan Khan, Dr. Naresh P., Dr. Sivananda L. Reddy

## Key Projects

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### SilentCare – AI Chatbot for Mental Health [🔗](#)

Accepted for Publication

- Developed an AI-powered mental health chatbot supporting patients with speech/hearing difficulties.
- Implemented LSTM-based NLP for accurate understanding of patient inputs (91% conversational accuracy).
- Integrated real-time sign language recognition using OpenCV and TensorFlow.
- Optimized response time with asynchronous processing for hospital-grade deployment.
- Containerized using Docker for scalable deployment in clinical or healthcare settings.
- **Tech Stack:** Python, TensorFlow, Flask, OpenCV, React.js, Docker

### Customer Lifetime Value Prediction – Healthcare Predictive Analytics [🔗](#)

- Developed predictive models to estimate customer/patient lifetime value and engagement metrics.
- Achieved high accuracy using ensemble models (Random Forest, Gradient Boosting) for reliable predictions.
- Conducted feature engineering and hyperparameter tuning to improve model robustness for healthcare data.

### Student Exam Performance Indicator Prediction [🔗](#)

- Built a classification model to predict student performance using academic and demographic data.
- Performed data preprocessing, feature selection, and visualization for interpretability.
- Containerized project with Docker and deployed on AWS EC2; used Terraform for infrastructure.
- **Tech Stack:** Python, Scikit-learn, Matplotlib, Pandas, Docker, AWS, Terraform

## Technical Skills

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**Programming & Scripting:** Python (NumPy, SciPy, Pandas, Matplotlib, Seaborn), C, Java (basic)

**Backend & API Development:** Node.js, Express.js, Flask, Spring Boot (basic), API Testing with Postman

**Databases & Data Handling:** MySQL, MongoDB, DynamoDB, SQLite; SQL NoSQL fundamentals

**DevOps & Cloud:** Linux, Git/GitHub/GitLab, Docker, Terraform (IaC), AWS (EC2, S3, Lambda), CI/CD Pipelines (GitHub Actions, GitLab CI), CloudWatch Logs

**Infrastructure & Automation:** Terraform, Docker, Kubernetes (exposure), Deployment Automation, GitOps (basic)

**Monitoring & Logging (Exposure):** Grafana (basic), CloudWatch

**AI & Machine Learning:** Supervised Unsupervised Learning, Feature Engineering, Model Training & Evaluation, Hyperparameter Tuning, Data Preprocessing, Predictive Analytics

**Deep Learning & NLP:** TensorFlow, Keras, PyTorch (exposure), OpenCV, LSTM, CNNs, NLP, Computer Vision, Image Processing, Feature Extraction

**Deployment & Supporting Skills:** Docker, Flask, FastAPI, Model Deployment & API Integration

## Online Courses & Certifications

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**Certified Agile Scrum Master Certification** – [Saudi Arabia - HRD University](#) [🔗](#)

**AWS Academy Graduate – AWS Cloud Foundations** – [AWS](#) [🔗](#)

**Docker Essentials: A Developer Introduction** – [IBM Skills Network](#) [🔗](#)

**Terraform for AWS – Beginner to Expert** – [Udemy](#) [🔗](#)

## Skills & Languages

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### Soft Skills

Problem-Solving and Analytical Thinking

Adaptability and Quick Learning

Agile Development and Teamwork

Proven ability to deliver results in a fast-paced environment by iterating rapidly and focusing on customer needs

### Languages

English

Arabic

Hindi/Urdu