

# JAGAN S

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## Summary

AI and full-stack development enthusiast with hands-on experience in deep learning, computer vision, data analytics, and end-to-end application development. Skilled in building scalable full-stack applications and integrating machine learning models into real-world systems. Proven ability to deliver efficient, explainable, and user-focused solutions across healthcare and customer analytics domains using Python, modern web technologies, and data-driven design.

## Skills

**Programming Languages :** Java, Python, Javascript

**Web Technologies & Frameworks :** Html, CSS, Nodejs , Expressjs

**Database :** MySQL, MongoDB

**Data Science & Machine Learning :** Matplotlib

**Tools & Platforms :** Git/GitHub, Postman, VS Code, Google Colab, Cursor

## Experience

### Machine Learning Intern

Dec 2024 – Jan 2025

VyBog India Pvt. Ltd.

- Built an end-to-end resume parsing pipeline extracting structured information from unstructured resumes using spacy and regex.
- Developed resume-job matching models using **TF-IDF, Word2Vec, and cosine similarity** to improve candidate ranking accuracy.
- Preprocessed and cleaned large resume datasets for ML model training and Evaluated models using **accuracy, precision, recall, and F1-score**.
- Delivered an intelligent Resume Parser and Matcher system improving candidate-job alignment.

## Projects

### Lightweight Explainable Kidney Stone Detection | Python YOLOv8, XAI

Nov 2025 – Dec 2025

- Developed a **YOLOv8-nano-based deep learning system** to detect kidney stones from **KUB X-ray images**, achieving **real-time inference (8–10 ms)** with a compact 6 MB model .
- Designed a **3-level explainable AI framework** (pixel-level Grad-CAM, region-level attention, clinical-level prognosis) to improve transparency and clinical trust .
- Evaluated the system on **1,300 annotated X-ray images**, achieving **mAP@0.5 = 0.85, precision = 0.89, recall = 0.87** .
- Built an **automated clinical severity scoring and urgency assessment** that reduced diagnostic time from **30–60 minutes to 2 minutes per case** .

### Progress-Tracker | Html, CSS, Node.js, Next.js, MySQL

Aug 2025 – Sep 2025

- Developed a full-stack progress tracking web application that enables users to create goals, log progress, and visualize trends through interactive dashboards.
- Implemented authentication and CRUD operations using Next.js (API routes), Node.js, and a relational database (MySQL).
- Built analytics features with chart-based visualizations and exportable progress reports to support data-driven insights.
- Designed a scalable backend architecture with secure APIs and efficient data handling.

## Education

### Easwari Engineering College, Chennai

2023 - Present

Bachelor of Technology in Artificial Intelligence and Data Science

CGPA: 8.28/ 10

## Achievements

- 3rd Place – SRM Project Expo 2025 (AI and Edge Computing Category) ↗

## Certifications

- AWS Certified Cloud Practitioner
- GitHub Foundation