

# Shrvaani S

Software Developer | Generative AI | Python | Java | MERN Stack

Phone: +91 87606 01342 | [sshrvaani@gmail.com](mailto:sshrvaani@gmail.com)

GitHub: <https://github.com/Shrvaani>

LinkedIn: <https://www.linkedin.com/in/shrvaani>

---

## Professional Summary

Certified Data Scientist and AI/ML Developer with hands-on experience in building intelligent software solutions using Python, Django REST Framework, PostgreSQL, Generative AI, Agentic AI, and modern web technologies. Skilled in deploying AI/ML models, creating scalable RESTful APIs, and delivering data-driven insights across EdTech, Telematics, and Retail domains.

Experienced in designing and implementing **RAG (Retrieval-Augmented Generation)** pipelines, building **AI agents** using **LangChain** and **LangGraph**, and orchestrating multi-step reasoning workflows using large language models. Proficient in object-oriented design, design patterns, and backend development with a strong command of cloud tools like AWS.

Adept at test-driven development, debugging, and backend performance optimization within Agile SDLC environments. Passionate about innovation and committed to solving real-world problems using AI to deliver impactful, scalable solutions.

Passionate about innovation and committed to solving real-world problems using AI to deliver impactful, scalable solutions.

---

## Technical Skills

- Languages: Python, JavaScript (ES6+), Java, SQL
- AI/ML: TensorFlow, PyTorch, Scikit-Learn, Hugging Face Transformers, OpenCV, NLTK, GPT-based APIs, Gemini models, o3/o4-mini reasoning models, Prompt Engineering (basic), Retrieval-Augmented Generation (RAG), LangChain, LangGraph, Agentic AI Frameworks (custom agents, memory & tools integration), Image Generation (DALL·E, Hugging Face Diffusers)

- Web Frameworks: Flask, Django, Streamlit, MERN Stack (MongoDB, Express, React, Node.js)
  - Data Analysis & Visualisation: Pandas, NumPy, Matplotlib, Seaborn, Plotly
  - Databases: MySQL, SQLite3, MongoDB
  - Tools: Git, GitHub, Jira, Trello, Postman, VS Code, Xcode, and Cursor.
  - Cloud & DevOps: AWS, GitHub Actions, REST APIs
- 

## Work Experience

### Software Trainee

**Montbleu Technologies Pvt Ltd**, Coimbatore

Oct 2023 – Jun 2024

- Developed backend APIs and real-time pipelines for [www.MotivAI.tech](http://www.MotivAI.tech) — an AI-based telematics system improving road safety and reducing fleet accident rates.
- Integrated OpenCV with Flask for real-time object detection, lane tracking, and driver behaviour analysis.
- Deployed AI/ML models (TensorFlow) for predictive analytics on driver performance.
- Handled database architecture (MySQL/SQLite), async task queues, and API security.
- Contributed to system performance optimisation and CI/CD workflows, file handling, and asynchronous task processing.

### Product Development & Program Management Trainee

**Iamneo (Formerly Examly)**, Coimbatore

Aug 2024 – Feb 2025

- Built intelligent feedback systems using OpenAI APIs for personalised learning.

- Designed backend logic in Django for dynamic assessments and data dashboards.
  - Worked with adaptive learning models and gamified user experiences in an EdTech ecosystem.
  - Led sprint planning, QA testing, and UX improvement initiatives using Jira.
- 

## **Key Projects**

### **AI Assistant using Streamlit**

- Built a GPT-powered assistant with OpenAI API and Streamlit, covering token handling, chat persistence, and multi-turn dialogue.

### **LaughBot - AI Chatbot**

- Streamlit-based chatbot generating dynamic, humorous responses; integrated real-time UX controls.

### **AI Image Gallery (GPT + Vision)**

- Developed a Streamlit-based application that allows users to generate images from text prompts using DALL·E and Hugging Face Diffusers APIs.
- Implemented input validation, prompt tuning interface, and real-time image rendering.
- Integrated download functionality and session history.

### **Weather App Using Next.js**

- A modern web application using Next.js and TypeScript, featuring real-time weather data and a responsive UI.

### **Resume Builder Web App**

- Django application with dynamic sections editable via the admin interface. Integrated SQL backend and Bootstrap UI.

### **Tic-Tac-Toe Game**

- CLI and GUI-based Python game; implemented game state logic and database logging with SQLite.

## Hugging Face Text Generation

- Generate text from powerful Hugging Face models like Gemma or Llama with a simple, secure Streamlit app.

## AI-Video-Analysis System (Streamlit + YOLOv8 + DeepFace + OpenCV):

<https://shrvaani-ai-video-analysis-system-app-sgrhum.streamlit.app/>

- Built a real-time AI web app for person detection, re-identification, and payment classification in CCTV videos.
- Used YOLOv8 for detection, DeepFace/TorchReID for persistent ID tracking across sessions.
- Integrated MD5 video hashing, cash/card detection via a custom YOLO model.
- Delivered interactive dashboards with charts, logs, and search.
- Enabled entry/exit logging, appearance counts without duplicates, and theme toggle.
- Optimized performance with frame skipping, GPU acceleration, and batched embeddings.

---

## Education

### Bachelor of Science in Information Technology

Nirmala College for Women, Coimbatore (2020-2023)

- **Grade:** A+ | Affiliated to Bharathiar University
- **Awarded:** Best Student of the Year (2020–2023)
- **Leadership:** **Department Secretary**; represented the college in technical and non-technical events

---

## Certifications

- Advanced Diploma in Data Science, AI & Machine Learning (2023)
- 

## Languages

- English: Full Professional Proficiency
  - Tamil: Native/Bilingual Proficiency
- 

## Career Vision

- To become a proficient AI/ML Software Developer, one must create scalable, intelligent systems.
  - To actively contribute to open-source and tech communities.
  - To explore advancements in cloud computing, big data, and blockchain for real-world impact.
  - To drive business outcomes with AI/ML, predictive analytics, and automation at scale.
-