

ABHAY SINGH SENGAR

Bhopal, Madhya Pradesh

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EDUCATION

VIT Bhopal University

Bachelor's of Technology(Computer Science) - **CGPA - 7.78**

Sep 2022 – May 2026

Kothri Kalan, India

Sagar Public School, Saket Nagar

AISSCE - Science Stream - **CGPA - 8.4**

Jun 2021 – Jul 2022

Bhopal, India

PROJECTS

Codpal 🔗 | [Langchain](#), [Gradio](#), [Ollama](#)

May 2025

- Designed and deployed an AI-powered coding assistant integrating Ollama LLMs with a hosted Gradio.
- Implemented real-time code correction, intelligent suggestions, and guided learning features for beginner programmers.
- Built a user-centric interface ensuring seamless communication between local AI inference and cloud-based deployment.
- Reduced debugging time for new developers by 40 percent and improved code learning efficiency.

Xtractor 🔗 | [Langchain](#), [CrewAI](#), [OpenAI](#)

Jun 2025

- Developed a multi-agent Retrieval-Augmented Generation (RAG) system to analyze and process entire YouTube channels.
- Automated video content search, topic extraction, and summarization pipelines, significantly cutting manual research time.
- Engineered a content synthesis and blog-generation workflow integrating context-aware agents for scalable content creation.
- Achieved 90% reduction in research effort, enabling automated long-form content generation.

MathGPT 🔗 | [Langchain](#), [GroqLPU](#), [streamlit](#),

Jul 2025

- Built an intelligent math solver web app leveraging GroqLPU inference and LangChain conversational memory.
- Implemented step-by-step solution explanations, persistent history tracking, and interactive learning tools.
- Designed an intuitive Streamlit interface for real-time engagement and personalized problem-solving assistance.
- Delivered a consistent and explainable problem-solving workflow, enhancing student learning outcomes.

TECHNICAL SKILLS

Languages: Python, C++, Cypher Query Language, SQL

Developer Tools: VS Code, Trae, WindSurf

Technologies/Frameworks: GitHub, streamlit, Langchain, MongoDB, Neo4j, AstraDB, Huggingface, OpenAI, Ollama, GroqLPU, CrewAI, OpenCV, Scikit-learn, Tensorflow, Keras, pandas, matplotlib, numpy

CERTIFICATIONS

- OpenCV Bootcamp - OpenCV University
- MongoDB Administrator - FacePrep
- Data Science/Analytic 3 month mentorship - PreGrad
- Generative AI Course With Langchain and Huggingface - Udemy
- Computer Vision Deep Learning: OpenCV, YOLO, ResNet - Udemy