

TARUN KUMAR RATHORE

+91 7999002506 | tarun422rathore@gmail.com | [LinkedIn](#) | [GitHub](#) | [Portfolio](#)

SUMMARY

Generative AI Engineer skilled in Python, SQL, and Machine Learning with experience building LLM applications, automating workflows, and developing multimodal AI systems. Delivered 40% improvement in model reliability, reduced manual effort by 50%, and developed GenAI solutions using GPT, Gemini, LangChain, and SDXL for real-time insights.

SKILLS

Programming & Querying: Python, MySQL, HTML, CSS

Machine Learning & Generative AI: Statistics, NLP, Deep Learning, OpenCV, LangChain, LLMOps (LangSmith)

Data Analytics & Visualization: Power BI, Advanced Excel, Matplotlib, Seaborn

Cloud & Deployment: Google Cloud Platform (GCP), Streamlit, Gradio

Version Control: GitHub, MLOps, CI/CD

PROJECTS

Sentiment Classification of Restaurant Reviews

Python, NLP, ML

- Optimized sentiment classification by evaluating 9 ML models; selected SVM achieving 97.5% accuracy and 0.9978 AUC.
- Automated review analysis workflow, improving processing efficiency by 40%.

Loan Default & Risk Analysis

Power BI, SQL

- Developed a Power BI dashboard with DAX metrics, reducing reporting time by 40%.
- Automated SQL pipelines for regional performance analytics.

LLM-Powered Chat Assistant

LangChain, LLMOps, API

- Built a Streamlit chatbot using GPT and Gemini with LangChain and LangSmith LLMOps.
- Optimized multi-model operations, improved prompt reliability, and secured all credential workflows.

Stable Diffusion XL-Based Image Synthesis System

SDXL, Hugging Face Diffusers

- Built a high-quality image generator using Stable Diffusion XL (SDXL 1.0) with optimized text-to-image synthesis.
- Leveraged mixed-precision loading to reduce latency and memory constraints on consumer hardware.

Computer Vision Pipeline Using MediaPipe

OpenCV, NumPy

- Developed fast, on-device computer vision workflows using MediaPipe Tasks, OpenCV, and NumPy, leveraging the MediaPipe framework for production-grade efficiency.

CERTIFICATIONS

- Google Data Analytics Certificate - Coursera
- Oracle Data Science Professional - Oracle
- Deloitte Data Analytics Job Simulation - Deloitte
- Machine Learning with Python - IBM Cognitive Class
- AI Passport - EY & Microsoft
- Power BI - CoursePe

ACHIEVEMENTS

- Received the NSS "B" Certificate for national service and leadership.
- State-level achiever in Vedic Mathematics, demonstrating strong mental math skills.
- Earned 20+ Google Cloud Skill Badges in Data and AI.

HOBBIES

- Cricket, Badminton, Stand-up comedy.

EDUCATION

Chhattisgarh Swami Vivekanand Technical University (CSVTU)

2021-2025

Bachelor of Technology, Computer Science - 79.72%

Saraswati Higher Secondary School, Korba , Chhattisgarh

12th - 95.4% 2021 | **10th** - 89% 2019