

Veerpratap Singh Tomar

+91 7439475536 | pratapveer579@gmail.com | linkedin.com/in/veerpratap-singh-tomar | github.com/veerpast

Final-Year CSE (AI & ML) Student | Software Engineering | AI Engineering | Machine Learning

Education

Adamas University, Kolkata

2023–2027

B.Tech in Computer Science Engineering (AI & ML) CGPA: 8.50

Senior Secondary (XII), CBSE – Science

2022

76.00%

Projects

VideoSage – AI Video & Meeting Intelligence System

Python, Streamlit, FastAPI, Groq, Supabase, ChromaDB, Playwright | GitHub | Live Demo

- Built a production-oriented, multi-user system that converts YouTube videos, uploaded media, and live Google Meet sessions into transcripts, summaries, decisions, action items, open questions, and grounded RAG answers.
- Designed a two-tier ingestion router using direct captions with a yt-dlp/Groq Whisper fallback, reducing observed extraction latency from approximately 45 seconds to 0.5 seconds (98%) when captions are available.
- Architected a Streamlit frontend and authenticated FastAPI worker on an Oracle Cloud Linux VM, automating Google Meet through Playwright, Chrome, Xvfb, PulseAudio, and FFmpeg.
- Secured account-scoped PostgreSQL data with Supabase Auth and RLS; implemented restart-safe queues, consent, quotas, retention, and audio cleanup, backed by 31 unit tests and CI checks.

Multimodal Driver State & Intention Detection System

Python, OpenCV, MediaPipe, TensorFlow/Keras, DeepFace | GitHub

- Engineered a real-time driver-monitoring pipeline using MediaPipe Face Mesh, DeepFace, Eye Aspect Ratio, geometric head-pose estimation, and threaded audio RMS analysis.
- Built an interpretable multimodal fusion engine combining four signal streams into live risk and intention alerts (Safe to Critical) at sub-100 ms per-frame latency.

Experience

TailorTalk

May 2026–Present

AI Operations and Support Intern

- Deployed and supported multi-step AI agent workflows for B2B clients using Claude MCP and n8n, troubleshooting client-specific pipelines and reducing manual onboarding effort.
- Owned end-to-end QA by reproducing issues, tracking fixes with engineering, documenting edge cases, and analyzing PostHog funnels to surface product improvements.

Supaboard, Bengaluru

Mar 2025–Oct 2025

Digital Marketing Intern

- Drove 60%+ of Product Hunt launch upvotes organically, then independently managed a second launch to Product of the Day and Top 3 of the Month.

Additional: Business Development Executive, Inspecvision India Pvt Ltd (Jul–Dec 2024) – managed B2B outreach and lead qualification for 3D-printing and laser-scanning solutions.

Technical Skills

Languages: Python, SQL, Bash/Shell Scripting

AI/ML: Retrieval-Augmented Generation (RAG), LLM Integration, Groq/Llama, Whisper Speech-to-Text, Prompt Engineering, Text Embeddings, Semantic Search, Real-Time Inference, Multimodal Fusion

Frameworks & Libraries: LangChain, FastAPI, Streamlit, ChromaDB, Hugging Face Sentence Transformers, TensorFlow/Keras, OpenCV, MediaPipe, DeepFace, NumPy, SciPy

Databases & Backend: Supabase, PostgreSQL, MongoDB, REST API Design, Microservices, JWT Authentication, Row Level Security (RLS), Background Jobs, Job Queues, Unicorn

Cloud, Automation & Tools: Oracle Cloud, AWS Cloud Foundations, Linux, Docker, Git, GitHub Actions, CI/CD, Pytest, Playwright, FFmpeg, Xvfb, PulseAudio, Caddy, systemd, n8n, Claude MCP, PostHog, Jira

Certifications

AWS Academy Graduate – Cloud Foundations | Oracle Certified Foundations Associate | Generative AI Certification