REETH JAIN

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EDUCATION

- **Indian Institute of Technology, Roorkee** — Uttarakhand, India
  B.Tech. in Chemical Engineering — *2022 – Present*

INTERNSHIPS

- **AI SDE Intern | Xelron.ai** — Feb 2025 – March 2025
  - Built 15+ production AI agent benchmarks (Docker, pytest, TOML) for reproducible Harbor evaluation.
  - Automated validation (11 quality gates) reduced inconsistencies and ensured deterministic evaluation.
  - Standardized task schemas (JSON specs, edge cases) improved reproducibility and auditability.
  - Delivered benchmarks across ML, data-processing, security, scientific-computing; multi-domain coverage.

- **AI Developer Intern | HelloAgentic.ai** — Dec 2025 – Feb 2026
  - Built production AI platforms using FastAPI, Claude/Gemini/GPT-4o, and LLM-driven agentic workflows at scale.
  - Architected scalable FastAPI backends with LangChain orchestration, planners, and async workers.
  - Implemented 12+ AI agents for intent classification, UI generation, segmentation, and ROI predictions.
  - Designed React 19 + TypeScript frontends with Figma-like editors, real-time WebSockets, and ML dashboards.
  - Deployed cloud-native systems using Docker, Railway, Supabase, Pinecone, Playwright, JWT/OAuth2, and CI/CD.

PROJECTS

- **Autonomous Security MLOps Platform | FastAPI, MLflow, Docker, GitHub Actions** [GitHub]
  - Built MLOps pipeline with Isolation Forest, MLflow registry, DVC versioning, and GitHub Actions CI/CD.
  - Developed FastAPI inference service with rate limiting, API auth, Docker containerization, and Prometheus metrics.
  - Implemented Airflow DAGs for drift detection using PSI monitoring, canary evaluation, and auto-rollback triggers.
  - Engineered hybrid risk scoring combining ML classifiers, anomaly detection, and rule-based SQL injection detection.
  - Integrated LLM explainability, kill-switch safety controls, analyst feedback loops, and SOC alert generation system.

- **Hallucination-Aware Hybrid LLM System | RAG, QLoRA, FAISS, Phi-3 Mini** [GitHub]
  - Engineered RAG pipeline with FAISS retrieval, SentenceTransformer embeddings, and strict grounding prompts.
  - Fine-tuned Phi-3 Mini (4k) with QLoRA+PEFT, 4-bit quantization for fast CPU/GPU inference.
  - Deployed FastAPI + Streamlit with API-key auth, rate limits, metrics, logging, and health checks.
  - Automated CI tests and retrieval benchmarks to validate grounding accuracy and abstention behavior.

- **Multi-Modal Emotion-Aware Music Recommendation System | Wav2Vec2, ResNet50** [GitHub]
  - Built multi-modal emotion detector using ResNet50, DistilRoBERTa, Wav2Vec2, TensorFlow & Streamlit.
  - Deployed Dockerized ML app on Render with GitHub Actions CI/CD, Sentry error tracking & Prometheus.
  - Fine-tuned ResNet50 on RAF-DB achieving 74% accuracy using Keras, data augmentation & class weights.
  - Integrated Spotify API for emotion-based music recommendations using Python, OpenCV, Librosa, Spotipy.

- **GenAI-Based YouTube & Web Summarizer | Whisper, LangChain, LLaMA-3** [GitHub]
  - Built AI-powered summarizer with Streamlit, Groq LLM, Whisper, intelligent caching reducing API calls 70%.
  - Implemented Whisper audio processing, rate-limiting, caching, export functionality, comprehensive error handling.
  - Delivered production-grade microservice with Docker, comprehensive testing, structured logging, and monitoring.

AWARDS / SCHOLARSHIPS / ACADEMIC ACHIEVEMENTS

Silver Medal in Techshilla 2.0 (Tech-Enhanced AI Interview Platform) | Pre-Finalist, WWT Unravel 2025 | AIR 6328 (JEE Main) | AIR 7306 (JEE Advanced) among 1.5 M candidates

TECHNICAL SKILLS

Programming: Python, SQL, C++, Bash
Backend & Systems: FastAPI, REST APIs, Async I/O, Background Workers, Auth, Distributed Systems
Machine Learning: Scikit-learn, XGBoost, Feature Engineering, Model Training, Evaluation
GenAI & Agentic AI: LLMs, Prompt Engineering, LangChain, RAG, Vector Databases, Multi-Agent Orchestration
MLOps & LLMOps: Docker, CI/CD, MLflow, Model Registry, LLM Fine Tuning, LLM Serving, Monitoring, Cost Control
Cloud & DevOps: AWS, GitHub Actions, Logging, Metrics, Health Checks