

Manas Sharma

+91-8879628490 | its.manas.sharma@gmail.com | [linkedin.com/in/manas1104](https://www.linkedin.com/in/manas1104) | github.com/Technocrat-dev | [Portfolio](#)

EDUCATION

Manipal Academy of Higher Education

Bachelor of Technology, Computer Science – 8.5 cpga

Bengaluru

Jul 2023 – Jul 2027 (Expected)

EXPERIENCE

Backend Engineering Intern

NRI Banking & Investment Infrastructure

RupeeFlo (Fintech)

May 2026 – Present

- Migrated document-generation (notarization, e-sign) pipelines from **Supabase** to the core **Django** backend, collapsing a 3-call chain into one API; proved **0% divergence** pre-cutover with a PDF-diff **parity harness**.
- Designed a **3-tier OTP fallback** (WhatsApp → SMS → voice) using **Django**, **Celery**, and **Redis** with atomic **SETNX** concurrency locks, rate limits, and idempotent escalation; validated **27** replay/race edge cases.
- Shipped an **AI support draft generator** to production, aggregating **Freshdesk** history and Customer-360 data into structured **LLM tool-use** calls; agent-reviewable drafts in **10–13s** with **70%** coverage on 78 real tickets.

Machine Learning Intern

Video Analytics Division

Reliance Industries Limited

May 2025 - Jul 2025

- Built a real-time occupancy detection system using **YOLOv11** and **DeepSort** to track chair usage across **RTSP streams** and webcam feeds, achieving **30+ FPS** throughput with sub-second latency on GPU deployment.
- Designed a **Multi-Camera Manager** with spatial deduplication and priority-based conflict resolution to eliminate duplicate counts across overlapping FOVs, enabling unified multi-feed analytics.

PROJECTS

Distributed Message Broker | Go, Protobuf, gRPC

- Built a distributed message broker using **HashiCorp Raft** for consensus and **partition sharding** for scalability, achieving **100K+ msg/sec** throughput with fault-tolerant streaming across **3-node clusters**.
- Implemented **leader-follower replication** with ISR; integrated **Gzip/Snappy/LZ4 compression** reducing storage by **60%** and achieving **sub-5s failover** times.
- Developed segmented commit logs with **log compaction** and fsync durability; built **Prometheus monitoring** and **Docker/Kubernetes** deployments supporting **1000+ partitions** with zero-downtime updates.

VLM Evaluation Pipeline for Driving Scenes | Python, VLMs (Gemini / Llama 4), Pydantic, Docker

- Built an automated **VLM evaluation pipeline** benchmarking **8 prompt-engineering strategies** on BDD100K driving scenes against ground truth across **8 metrics** (BERTScore, hallucination rate, spatial grounding, **LLM-as-judge**); structured-output prompting cut **hallucinations by 35%** and count error by **38%**.
- Developed an **AI error-analysis agent** that mines evaluation results for systematic failure patterns and **auto-generates improved prompts**; dual VLM backend with rate-limit-aware **checkpoint/resume** orchestration.

Marketplace Price Prediction | PyTorch, FastAPI, Next.js, MongoDB, Docker

- Trained a **BiLSTM + attention** model on **1.48M** product listings to predict prices from text and metadata, achieving **0.430 RMSLE** and beating XGBoost/LightGBM baselines.
- Built a **FastAPI** serving layer with rate limiting, caching, and **SHAP** explanations; deployed the Dockerized stack on **GCP Cloud Run** with GitHub Actions CI.

TECHNICAL SKILLS

Languages: Go, Python, SQL, TypeScript, C++, Java

Frameworks & Libraries: gRPC, Protobuf, Django/DRF, FastAPI, Celery, Next.js, React.js, Node.js, LangChain

Machine Learning: PyTorch, LLMs, RAG, Scikit-learn, OpenCV, ONNX

Databases & Infrastructure: PostgreSQL, MongoDB, Redis, Docker, Kubernetes, GCP, AWS, Linux

CS Fundamentals: DSA, OOP, Multithreading & Concurrency, Operating Systems, DBMS, Computer Networks

ACHIEVEMENTS & CERTIFICATIONS

- Solved **300+** problems on LeetCode and CodeForces.
- Winner, Atos Hackathon 2026** (100+ teams); **4th place, CCL Hackathon 2026** (500+ teams).
- Certifications:** Deep Learning Specialization, Azure AI Fundamentals.