Manvik Talwar
AI/ML Engineer

manvik.talwar@gmail.com
linkedin.com/in/manvik-talwar-
https://codexmanvik.github.io/portfolio/
https://github.com/CodexManvik
8800287735

Computer Science student focused on Generative AI and MLOps with hands-on experience building and shipping production AI systems.

Work Experience

AI Development Intern
Path Infotech

Jun 2025 - Aug 2025

- Designed, built, and deployed a production-ready AI chatbot leveraging Azure OpenAI, Azure Cognitive Search, and Azure Blob Storage; the solution is live on company servers and prepared for commercialization.
- Ensured 99.9% uptime while supporting 100+ concurrent users, engineered backend services that reduced API response times by 25% through optimized routing and compact payload handling, and implemented automated CI/CD on Azure App Service to cut release lead time to approximately 12 minutes.
- Led ingestion and semantic indexing of internal documents, implemented a RAG-enabled query pipeline with clickable citations, and collaborated with frontend and product teams to ready the product for customer rollout.

Projects

Sofia — Chatbot for Real-time Document Insights

- Built a production-focused chatbot that provides real-time, citation-aware answers over uploaded documents.
- Implemented document ingestion into Azure Blob Storage, semantic indexing with Azure Cognitive Search, and a Retrieval-Augmented Generation pipeline using Azure OpenAI for natural language responses.
- Developed the backend API, integrated click-to-view citation behavior, and shipped a responsive frontend. The project demonstrates end-to-end deployment, monitoring, and CI/CD practices for an enterprise-ready AI product.

FloatChat — ARGO Ocean Data Explorer

- Architected a full-stack conversational interface to query ARGO oceanographic datasets with a local RAG pipeline (Qwen LLM + ChromaDB).
- Implemented FastAPI backend, PostgreSQL for structured metadata, and interactive Streamlit visualizations.

Core Skills

C/C++, JavaScript, Python, SQL, FastAPI, Flask, HTML/CSS, React, Streamlit, Azure App Service, Azure Cognitive Search, Azure OpenAI Service, CI/CD, Docker, Git, Hugging Face Transformers, LLM Quantization, Pandas, PyTorch, Retrieval-Augmented Generation (RAG), Scikit-learn, TensorFlow, Vector Databases (ChromaDB & FAISS), MongoDB, PostgreSQL, SQLite

Education and Awards

Manipal University Jaipur

Aug 2023 - Aug 2027

Bachelor of Technology Artificial Intelligence and Machine Learning

- 3 x Student Excellence Award