Manas Dubey

701-138-5250 | manas.dubey007@gmail.com | Linkedin | Github

Education

Manipal University Jaipur — Rajasthan,IN
B.Tech Computer Science Engineering (AIML) — *Aug. 2022 – Present*

The Air Force School — New Delhi,IN
CBSE Board Examination for X and XII — *Apr 2020 – May 2022*

Projects

WayPoint -AI Trip Planner |***Link***| Next.js,Shadcn-UI, Node.js, Convex, HF+Gemini,Clerk Auth, Razorpay,Resend

- Designed and deployed a hybrid LLM architecture (Phi-2 + Gemini API) for WayPoint AI Travel Planner, cutting API dependency by 60% and slashing itinerary generation time from 1.2s to 650ms.
- Developed a Next.js 15 + TailwindCSS frontend with SSR, enabling 1.4s first contentful paint and enhancing user experience for 10k+ simultaneous trip planning sessions.
- Optimized Node.js API layer with Convex backend, improving query response times to sub-700ms and reducing cold start latency by 45% in dynamic travel plan generation.
- Designed and implemented scalable architecture with integrated features such as weather-based suggestions, budget estimation etc.

FinSight-Copilot |***Link***| Next.js, FastAPI, LangChain(RAG), Hugging Face, BeautifulSoup, Tailwind CSS

- An AI-powered financial assistant that enables real-time search, analysis, and conversational insights on market data, stocks, and SEC filings using RAG-based query processing.
- Engineered a Retrieval-Augmented Generation (RAG) pipeline using LangChain and BeautifulSoup, improving financial data extraction accuracy by 32%.
- Optimized data preprocessing with asynchronous API architecture and pre-chunked datasets, reducing query latency by 40%.
- Integrated Next.js, FastAPI, and Tailwind CSS to deliver a scalable AI-powered financial assistant with 50% faster multi-entity search response times.

Legally-AI |***Link***| Next.js, Node.js, MongoDB, LegalBERT, LLaMA 2-7B, FAISS, Hugging Face, Docker

- Planned and implemented a custom Legal Embedding Model with FAISS for high-precision legal document retrieval across 100k+ QA pairs, reducing response latency by 40%.
- Achieved 85%+ accuracy in case outcome prediction and 90%+ precision in legal query responses during system validation using a dataset of 15,000+ Supreme Court cases
- Secured Rs.9,00,000+ seed funding from MUJ E-Cell to scale platform capabilities, including multilingual support, OCR for scanned legal documents, and lawyer consultation booking system.
- Architected future-ready modules for multilingual NLP and regional legal system adaptation to expand accessibility for 10 crore+ potential users.

Technical Skills

- **Languages:** Python, JavaScript, C++, C, Java, SQL.
- **Frameworks & Web Technologies:** React.js, Next.js, Node.js, Express.js, HTML5, CSS3, Tailwind CSS.
- **Libraries:** Scikit-learn, PyTorch,TensorFlow, Keras, Hugging Face Transformers, FAISS, LegalBERT, LLaMA 2-7B.
- **Developer Tools:** Cursor AI , Git, GitHub, Netlify, Docker, Postman, Firebase, Streamlit, Hugging Face.

Achievements

- Participated in 9+ Hackathons and Ideathons.
- Awarded Rs.9,00,000+ seed funding from MUJ E-Cell for Legally-AI Prject.
- Published review paper on "A Comprehensive Review on Object Detection:Advances and Challenges Over 25 Years"