

HARSHVARDHAN SHAH

EDUCATION

Indian Institute of Technology (BHU), Varanasi	2024 - 2028
Bachelor of Technology in Mining Engineering	7.97
Macro Vision Academy	2024
CBSE	88.80%
Nehru Montessori H.S School	2022
CBSE	95.00%

SKILLS

- **Programming Languages:** Python, C, C++, JavaScript, TypeScript
- **Frameworks:** Scikit-learn, TensorFlow, Keras, PyTorch, FastAPI, Flask, React, Next.js
- **Tools and Technologies:** Git, Github, Linux CLI, Vercel, Render, Docker
- **Database:** PostgreSQL, MongoDB

PROJECTS

Sentinel	Github · Demo
<i>Real-Time Multimodal Content Moderation Pipeline</i>	
Tech Stack: FastAPI, Redis, PostgreSQL, MinIO, Docker, PyTorch, Hugging Face, LLMs, WebSockets, React.	
• Architected an event-driven moderation backend using FastAPI, Redis Streams, and MinIO, enabling non-blocking asynchronous ingestion and processing for multimodal content. • Integrated dual AI worker pipelines with Hugging Face CV models and LLMs to classify images and detect nuanced textual policy violations. • Engineered a configurable decision engine & review UI, routing borderline infractions via WebSockets to a React/TypeScript dashboard with a PostgreSQL audit log.	
Syntrak	Github · Live
<i>Autonomous AI Code Reviewer & Assistant</i>	
Tech Stack: Python, FastAPI, LiteLLM, SQLAlchemy, PostgreSQL, SSE, Prompt-Toolkit	
• Engineered an open-source, multi-provider autonomous coding assistant and reviewer supporting 10+ LLM providers (NVIDIA NIM, OpenAI, Claude, Groq, Ollama) via unified LiteLLM integration and streaming tool • Architected a high-throughput async backend with FastAPI and Server-Sent Events (SSE), orchestrating a dual-mode ReAct agent loop, real-time token/event streaming, multi-database persistence (PostgreSQL/SQLite via SQLAlchemy 2.0), and secure Google OAuth 2.0/JWT authentication. • Built an interactive developer web console (syntrak.nvim) & terminal REPL, featuring targeted AST/regex search-and-replace file editing, automated git checkpointing with instant /undo rollback, and dynamic GitHub repo cloning	
ShortURL - URL Shortner	Github · Live Demo
Tech Stack: FastAPI, React, SQL, Redis, REST APIs, Vercel, Render.	
• Developed a full-stack URL Shortener using FastAPI, React, SQLAlchemy, SQLite, Redis, and Tailwind CSS, enabling efficient URL shortening with responsive user experience. • Implemented RESTful APIs, Base62 short-code generation, Redis caching, and click analytics, improving redirect performance and tracking URL usage. • Deployed the application on Render and Vercel with custom domains, configured CORS, environment variables, and production-ready backend/frontend integration.	

CERTIFIED COURSES

- **Machine Learning Specialization** from DeepLearning.AI and Stanford Online, Coursera

POSITIONS OF RESPONSIBILITY

Technex - Coverage Executive	March'26
• Served as Coverage Executive for Day 1 of Technex'26, leading real-time event coverage and successfully contributing to the post-production, documentation of multimedia content across digital platforms.	
FMC Weekend - Event Coordinator	Aug'25 - Sep'25
• Event Coordinator for FMC Weekend, managing key events and coordination to ensure smooth execution and participants experience	

EXTRA CURRICULARS

Exodia'26 , IIT Mandi	
• First position in The Hype and Runner-up in Sell it like Fire, as DoP and Editor, leading filming and post-production for High quality Exoreel and Ad.	