

An AI Engineer specializing in transforming complex data into high-impact, full-stack applications. My work spans from building Transformer models for bioinformatics research to architecting decentralized GovTech platforms, with a focus on creating scalable, intelligent systems that solve real-world problems.

Skills and Languages

- Languages: TypeScript, Python, C++, Java
- Backend: NodeJS, Express, FastAPI
- Databases: PostgreSQL (PostGIS), MongoDB, Neo4j (GraphDB)
- Frontend: ReactJS, NextJS, React Native, Vite, JavaScript
- AI/ML: NLP, Transformers, MLOps, PyTorch, Hugging Face, OpenCV
- **MLOps**: MLflow, Airflow, Web Scraping (BeautifulSoup4)
- **Blockchain**: Hyperledger Fabric, Ethereum
- Others: Linux, Git, GitHub, Azure, Firebase

Education

- **Btech. Computer Science & Engineering**, Bhagwan Parshuram Institute of Technology, Delhi **2024–2028 (ongoing)**
- **Certifications**: [Full Stack Developer Certificate](#) – Udemy, 2025

Projects

- **Bioline: AI-Powered eDNA Analysis Platform**
 - A revolutionary bioinformatics platform using a Transformer AI to decode environmental DNA (eDNA), automating species identification and discovery to accelerate global biodiversity monitoring.
 - **Tech Stack**: Python, PyTorch, DNABERT, Hugging Face, MLOps (MLflow, Airflow), Neo4j, FastAPI, React.
 - [Deployed Website](#)
- **RuraLens: Digital Twin for Smart Rural Governance**
 - A groundbreaking digital twin platform for transparent rural governance, fusing IoT data, AI-driven predictive maintenance, and a tamper-proof blockchain ledger to empower accountable community development.
 - **Tech Stack**: AI/ML (PyTorch, YOLO), Web3 (Hyperledger Fabric), PostGIS, Python, Node.js, React.
 - [Deployed Website](#)
- **AI Quiz Clash**
 - Launched a real-time 1v1 competition platform with an on-demand generative AI engine that crafts infinite, unique questions on any topic imaginable, creating a scalable and endlessly engaging knowledge-based experience.
 - **Tech Stack**: React, Vite, JavaScript, Firebase (Auth, Firestore), Google Gemini.
 - [Deployed website](#)
- **MOSDAC-AI**
 - An autonomous AI agent that scrapes, structures, and comprehends complex meteorological and oceanographic data, enabling natural language queries on vital climate information.
 - Tech stack: Python, Google Gemini API, **Web scraping**, regex, **data structuring**, **AI agent**, NLP, BeautifulSoup4 and FastAPI.
 - [Deployed Website](#)

Interests

- Exploring **neural networks**, NLP, and Retrieval-Augmented Generation (RAG). Focused on building a strong theoretical foundation for advanced AI/ML applications