# NETRANSHI TRIPATHI

Kanpur, India | P: +91 9793433633 | Gmail | LinkedIn |
GitHub | Hackerrank | Leetcode

## EDUCATION

**RAJKIYA ENGINEERING COLLEGE** Expected May 2026 Bachelor of Technology In Electronics Engineering
Cumulative GPA: 7.6/10

## WORK EXPERIENCE

**DEFENCE RESEARCH AND DEVELOPMENT ORGANISATION (DRDO)**
Intern **(July 2025 – July 2025)**
- Developing and deploying resource-efficient TinyML models tailored for microcontroller-based platforms with real-time constraints
- Utilized the Edge Impulse platform and embedded tools to develop and deploy TinyML models optimized for resource-constrained IoT devices.
- Collaborated on hardware-software interfacing for edge intelligence solutions in IoT applications

**CODSOFT**
Web Developer Intern **(September 2024 – November 2024)**
- Built a cross-browser compatible calculator using HTML, CSS, and JavaScript with precise error handling for seamless computation.
- Developed a responsive personal portfolio site, increasing mobile usability by 60% and improving page load time using optimized assets.
- Created a modular and reusable landing page layout using CSS variables, ensuring design consistency across components.

**GIRLSCRIPT SUMMER OF CODE**
Contributor **(Summer 2024)**
- Resolved **10+ issues** and submitted feature-rich pull requests to open-source projects..
- Contributed to front-end and back-end web development, implementing new features that increased user engagement by 20%.
- Mentored beginners and reviewed peer contributions to enhance project quality..

## PROJECTS

**AI-POWERED MARKSHEET DATA EXTRACTION API USING FASTAPI AND OPENAI VISION**                    **Github**
- Developed an AI-powered Marksheet Extraction API using FastAPI and OpenAI GPT-4 Vision, achieving over 95% accuracy in data extraction from image and PDF documents.
- Enabled multi-page PDF processing, supporting up to 5 pages per document, reducing manual data entry time by 80%.
- Implemented confidence scoring algorithms that increased data reliability by 30%, delivering structured JSON outputs for seamless integration.
- Achieved 99.9% API uptime with asynchronous request handling and comprehensive error management for scalable performance.

**RAG PIPELINE FOR INTELLIGENT DOCUMENT RETRIEVAL AND QUESTION ANSWERING**                    **Github**
- Constructed a document-aware QA system using LangChain and FAISS, enabling precise information extraction through semantic indexing.
- Applied advanced parsing and segmentation techniques to transform PDF content into high-quality vector representations.
- Engineered a flexible and extensible backend capable of handling user queries in real time, optimized for integration with diverse data environments..

**MULTI-MODEL CHATBOT USING OLLAMA FRAMEWORK**                    **Github**
- Engineered a scalable FastAPI backend integrating LangServe with Ollama language models, achieving 90%+ semantic accuracy in multi-modal content generation.
- Developed a Streamlit frontend supporting real-time essay and poem generation for 100+ concurrent users with sub-2-second response times.
- Orchestrated dynamic prompt-template integration, enhancing diversity and contextual accuracy of AI-generated outputs across varied user inputs.

## TECHNICAL SKILLS

**Generative AI & LLMs:** Prompt Engineering, Ollama, LangChain, LangServe, Hugging Face, OpenAI APIs
**AI Image & Video Generation:** Leonardo AI, Midjourney, DALL·E, Runway ML, PixVerse
**Machine Learning & Frameworks:** Scikit-learn, TensorFlow Lite
**Programming & Data Handling:** Python (NumPy, Pandas, Matplotlib, Seaborn), SQL.
**Databases:** MySQL, PostgreSQL, Vector Databases (FAISS)
**Data Engineering:** Docker, FastAPI, Streamlit.
**Cloud Platforms:** AWS.
**Tools & Platforms:** GitHub, Jupyter Notebook, Google Colab, Edge Impulse
**Web Development:** HTML, CSS

## ACHIEVEMENTS

- Appointed **Student Chairperson, IEEE-WIE**, leading student technical initiatives.
- Participated in **Group Discussions & Public Speaking**, enhancing communication skills.
- Earned **5★ in Python** and **5★ in Problem-Solving** on HackerRank.
- Solved **200+ coding problems** on LeetCode, strengthening DSA skills.

## CERTIFICATION

- Generative AI with OpenAI — KodeKloud
- Linux Basics — KodeKloud
- **IEEE** Membership Certificate