RISHABH TRIPATHI

+91-9650594608—New Delhi, India

rishabhtripathi2022@gmail.com—LinkedIn—GitHub — Leetcode

WORK EXPERIENCE

Industrial Trainee – DRDO, Scientific Analysis Group (SAG)   Jul 2025 – Aug 2025
- Designed and developed a full-stack web application for **Cipher** file analysis with **explainable AI integration.**
- Implemented ML models (Random Forest, XGBoost, Gradient Boosting) achieving up to **64.3**% accuracy in distinguishing **ciphertext** from random sequences.
- Integrated **SHAP** for model interpretability, enhancing transparency of cryptographic security analysis.
- Delivered an end-to-end system contributing to **DRDO's cryptanalytic research capabilities.**

TECHNICAL SKILLS

Programming Languages: Java, JavaScript, C++, Python, MySQL, and C.
Technical Skills: Data Structures and Algorithms, Web Development, NEXT-JS ,ReactJs ,HTML ,CSS , NodeJs, ExpressJs, MongoDB ,Object Oriented Programming,.
Certifications:
- ReactJs Certification By Coding Shuttle [Link]
- 20+ Google Skill Badges [Link]
- Data Science Foundation By IIT-Madras [Link]

EDUCATION

Degree	Institution	Year	Percentage/CGPA
B.Tech - CST	Maharaja Agrasen Institute of Technology, Delhi	2023 - 2027	CGPA: 8.8
Senior Secondary (CBSE)	School Of Excellence, New Delhi	2021 - 2022	Percentage: 90.2%

PROJECTS

QuickAI (**Node**, **React**,**Express**, **Tailwind CSS**, **PostgreSQL**, **Clerk**, **Neon DB**)   [Website] [GitHub]
- Built a **Full-stack AI platform** with tools like Resume Analyzer, Blog Generator, YouTube Video Analyzer, Background Remover, and Object Remover using Next.js, React, Tailwind CSS, and AI APIs.
- Integrated Clerk-based authentication and **Subscription plans**, with Neon **PostgreSQL** for scalable storage of user data, feature usage, and activity logs.
- Designed a responsive, modern UI and optimized **media handling through Cloudinary** to deliver smooth performance across all AI features.

Lesson Start – AI-Powered UI Builder (**Next.js**, **LangChain**, **LangGraph**, **Gemini**)   [Website] [GitHub]
- Built an **AI-driven lesson generation platform** that converts user prompts into complete, structured lessons with validated React UI output.
- Integrated **LangChain, LangGraph, and Gemini** to create a multi-step pipeline for prompt analysis, UI generation, code validation, and auto-fixing.
- **Implemented Supabase** storage and Clerk authentication for secure, user-specific lesson history and data management.
- Developed a clean, responsive interface enabling users to generate, preview, save, and revisit lessons effortlessly.

AI-Powered Expense Tracker (**Next.js**, **Prisma**, **PostgreSQL**, **Gemini AI**, **Clerk**)   [Website] [GitHub]
- Architected a full-stack AI expense tracker using **Next.js, Prisma, and PostgreSQL**, establishing a secure and scalable backend for robust financial data management.
- Integrated the **Google Gemini API** to deliver intelligent expense categorization and generate deep, personalized financial insights, forming the core AI functionality of the application.
- Engineered a secure and modern user experience with **Clerk for authentication** and a dynamic UI with Tailwind CSS, featuring interactive charts for intuitive data visualization.