

# Vishal Aggarwal

✉ aggarwalvishalo305@gmail.com 📞 +91 9306203046 📍 Ambala, Haryana 🌐 Portfolio

🌐 linkedin.com/in/vishalaggarwal0305

## EDUCATION

### BE Computer Science & Engineering

Chandigarh University | 8.55 CGPA

2020 – 2024

Kharar, Punjab

### 12th Class

Army Public School, Kamptee | 91.8% PCM (CBSE)

2019 – 2020

Nagpur, Maharashtra

### 10th Class

PKR Jain Senior Secondary Public School | 94.2% (CBSE)

2017 – 2018

Ambala, Haryana

## PROFESSIONAL EXPERIENCE

### System Engineer

Tata Consultancy Services (TCS)

2025 – Present

Pune, Maharashtra

- Developed interactive AI applications using Streamlit, enabling real-time user interaction with LLM-powered workflows.
- Built autonomous GenAI agents using LangChain, integrating tools and prompt workflows for task automation.

## PROJECTS

### ResumeEvaluator | AI Resume Analyser 🌐

Individual Project

- Developed a graph-based AI resume evaluation system using LangGraph, FastAPI, and LangChain to analyze skills, experience, projects, and education
- Integrated Llama 3.1 (Groq API) for low-latency, real-time inference, enabling fast and scalable resume analysis
- Implemented semantic skill matching and structured scoring algorithms to generate recruiter-style insights and candidate suitability predictions
- Designed a responsive frontend using HTML, CSS, and JavaScript and a modular backend architecture for efficient, scalable deployment

### Conjecture.AI | AI-Powered Hypothesis Generator 🌐

TCS AI Friday

- Engineered a JavaScript-based analytics engine to parse CSV data and automatically detect trends, correlations, and outliers for faster data understanding
- Built a serverless Node.js API with LLM integration (Groq LLaMA 3) to generate human-readable hypotheses, converting raw data into actionable insights
- Designed a hybrid analytics pipeline combining statistical methods with AI reasoning to simulate real-world data analyst decision-making
- Developed an interactive dashboard (Chart.js) to visualize insights and enable users to explore and interpret data through an intuitive UI

### RAG-Based Intelligent Assistant for Document Querying

TCS Internal

- Built a Retrieval-Augmented Generation (RAG) chatbot using Llama-3.1-8B-Instant, LangChain, and Groq API to answer user queries from uploaded PDFs with high contextual accuracy.
- Engineered a semantic document retrieval pipeline leveraging HuggingFace embeddings and FAISS vector indexing to enable efficient knowledge extraction from uploaded PDFs in a RAG-based GenAI system.
- Developed an interactive Streamlit interface featuring a typing effect and PDF upload support, enabling real-time responses and decreasing average user wait time by 3 seconds.
- Tech Stack: Python, LangChain, Streamlit, Groq API (Llama-3.1-8B-Instant), HuggingFace Embeddings, FAISS, PyPDFLoader, and dotenv

### News Classification 🌐

Individual Project

- Built a deep learning-based fake news detection model using TensorFlow and NLP techniques to classify news articles into genuine and fake categories.
- Tech Stack: Python, NLP, NLTK, Text Preprocessing, Vectorization, SciKit Learn