Jyant

Panipat, Haryana | jyant.2001@gmail.com | +91 9053642807 | linkedin.com/in/Jyant-45417b25a/

About

- I am a **Applied Mathematics and Scientific Computing student** at **IIT Roorkee**, eager to start my career as a **Data Scientist Or AI/ML Engineer**. I have experience working on Machine Learning, Data Analysis, and Predictive Modeling. My projects include Heart Disease Prediction, Airline Data Analysis, and a Secure Chatbot using AI. I have strong skills in Python, SQL, and data visualization and have qualified **CSIR NET (JRF) and GATE[Mathematics and Data Science]**. I am looking for an opportunity to apply my knowledge in real-world data problems and grow in the field of Data Science.

Education

IIT Roorkee, M.Tech. in Applied Mathematics and Scientific Computing — July 2023 – May 2025

- CGPA: 8.45/10

Kurukshetra University, M.Sc Mathematics — July 2020 – May 2022

- CGPA: 7.54/10

Kurukshetra University, B.Sc Non-Medical(PCM) — July 2017– May 2020

- Marks: 78.3%

Haryana Board of School Education,12th — April 2016 – March 2017

- Marks: 90.2%

Haryana Board of School Education, 10th — April 2014 – March 2015

- Marks: 89.2%

Projects

Airline Exploratory Data Analysis

- **Exploratory Data Analysis (EDA):** Conducted a detailed analysis of the **British Airline Dataset**, covering essential steps like **data cleaning and data visualization** to uncover key patterns and trends.
- **Insights and Trends:** Focused on **booking behavior, customer demographics and flight preferences**, Identified significant patterns to enhance decision-making in the airline industry

Heart Disease Prediction using Machine Learning

- **Heart Disease Prediction using Machine Learning:** The goal was to identify the best-performing model. Utilized **seven machine learning models** to predict heart disease, a rare event that required **data balancing through up-sampling** techniques
- **Model Performance:** Among the models, **Extreme Gradient Boosting (XGBoost)** achieved the highest accuracy at **96%.** The evaluation was performed using **accuracy score and confusion matrix.**

Private conversation with PDF: RAG+LLM Chatbot by using Langchain Library for Secure QA

- **Contextual PDF Chatbot:** Leverages **Retrieval-Augmented Generation (RAG) and Large Language Models (LLMs)** to generate responses based on the **content extracted from uploaded PDFs**.
- **Configurable Document Processing:** Facilitates **chunking and embedding** of PDF text to build a **vector database** for efficient **similarity search and retrieval.**

Awards / Scholarships / Academic Achievements

- Qualified the **CSIR NET(JRF)** Mathematical science 2023 with **AIR 184**
- Qualified the **GATE Mathematics** 2023 with **AIR 671**
- Qualified **GATE DATA SCIENCE** 2024 with **AIR 3165**

Technologies/Skills

- **Computer Languages:** Python, HTML, SQL
- **Software Packages** Numpy , Pandas, SciPy, Matplotlib, Scikit-learn, tensorflow , Langchain, Huggingface
- **Additional Courses:** Google Advanced Data Analytics Specialization, Machine learning certificate from kaggle

Positions of Responsibility / Extra Curriculars

- **Volunteer:** 12th International Conference on Soft Computing for problem solving (socproS 2023) at Department of Applied Mathematics and Scientific Computing, IIT Roorkee