

ACADEMIC DETAILS

Degree	Specialization	Institute	Year	CGPA/%
M.Tech.	Artificial intelligence	IIT Gandhinagar	2024-Present	9.29 CGPA
M.Sc(Hons).	Mathematics	Panjab University, Chandigarh	2022-2024	8.2 CGPA
B.Sc(Hons).	Mathematics	Panjab University, Chandigarh	2019-2022	8.3 CGPA
Class XII	Non Medical	D.A.V Centnary Public School	2019	94.4%
Class X		D.A.V Centnary Public School	2017	10 CGPA

TECHNICAL SKILLS

- **Programming languages** Python , C , Matlab , Maple, Fortran
- **Libraries:** NumPy, pandas, Matplotlib, scikit-learn, Seaborn, OpenCV, TensorFlow, PyTorch
- **Tools:** Docker, Git, CI/CD , AWS
- **Writing:** LaTeX
- **Database:** MySQL

MATHEMATICAL SKILLS

- **Analytical:** Statistical Data Analysis
- **Mathematical Modelling**
- **Complex Analysis**
- **Operational Research**
- **Linear Programming**
- **Linear and Abstract Algebra**

SOFT SKILLS

- **Problem Solving**
- **Critical Thinking**
- **Teaching**
- **Language:** English, Punjabi, Hindi

PROJECTS

- **Human Activity Recognition**Project Link
 - Developed a human activity classification project using NumPy, pandas, Matplotlib, TSFEL, scikit-learn, and Seaborn. Implemented decision trees and cross-validation techniques, and integrated zero-shot and few-shot methods.
- **Context-Aware Product Recommendation System using RAG**Project Link
 - Developed a product recommendation system using LangChain with a RAG pipeline, integrating Ol-lama LLM, chat history awareness, and vector store retrieval; deployed using Docker, AWS, and CI/CD pipelines for scalable inference.
- **Multi-Agent Reinforcement Learning for Autonomous Delivery Bots**Project Link
 - Develop a multi-agent reinforcement learning (MARL) system for autonomous delivery bots , Train 4 agents to pick up and deliver 8 packages in a 10x10 grid world using PPO and GAE, introduce momentum-based rewards to encourage consistent movement toward targets.

POSITION OF RESPONSIBILITY

- **Teaching Assistant** IIT GANDHINAGAR : (2024 - Present)

ACHIEVEMENTS

- **GATE (Data Science And Artificial Intelligence):** AIR 114 (2024)
- **GATE (Mathematics):** AIR 154 (2023)