



EDUCATION

Year	Degree/Exam	Institute	CGPA/Marks
2026	M.TECH	IIT Kharagpur	8.07 / 10
2023	B.TECH(CSE)	SRM UNIVERSITY	9.38 / 10
2019	HSC	Kendriya Vidyalaya ONGC Vadodara	80.2%
2017	SSC	Kendriya Vidyalaya ONGC Vadodara	9.8 / 10

INTERNSHIPS

Web Development Intern ,Imagica Health | May '25 - July '25

- Developed **RESTful** APIs using **Node.js** and **Express** to effectively manage and process patient data.
- Ensured smooth, reliable, and secure **integration** between the **backend** services and the frontend.
- Integrated **MongoDB** for healthcare data storage and retrieval, improving query efficiency and response time.
- Articulated **API documentation** and **Postman** test collections for easier system testing and developer onboarding.

PROJECTS

Image Captioning Using Transformers

Deep Learning | Prof. Pawan Goyal | IIT Kharagpur | Apr '25 –May '25

- Developed an image captioning pipeline (**ViT+GPT-2**) using a preprocessed dataset of **5.7K image-caption pairs**.
- Evaluated model performance with **BLEU**, **METEOR**, and **ROUGE-L** metrics, achieving strong results.
- Benchmarked** against **SmoIVLM (zero-shot)** and ran **occlusion robustness tests**, logged results in CSV.
- Fine-tuned **BERT-based** to classify captions from two generative models, achieving **99.7% accuracy** and macro F1.

BERT-based Misinformation Detection for Social Media

Design Lab | Prof. Niloy Ganguly | IIT Kharagpur | Mar '25 –Apr '25

- Engineered a data preprocessing pipeline for **10,600 social posts**, removing textual noise to improve model training.
- Built a COVID-19 fake news classifier using PyTorch, achieving **96.7% accuracy** and a **0.97 Macro F1-score**.
- Fine-tuned and evaluated three **BERT models** via **hyperparameter tuning** to identify the best architecture.

Personalized Actor Recommendation System using Singular Value Decomposition (SVD)

Data Analytics Lab | Prof. Abhijnan Chakraborty | IIT Kharagpur | Sept '24 –Oct '24

- Curated TMDb movie–cast data using requests, **BeautifulSoup** and fetching **20k** records to build actor features.
- Trained and tuned a **collaborative filtering model (Surprise SVD)** via **GridSearchCV**, and **deployed the best model**.
- Evaluated ranking performance using **Precision@5**, **Recall@5**, and **NDCG@5** on an 80/20 split with **87% precision**.

Ensemble-Based Threat Prediction for Demographic Data

Data Analytics | Prof.Abhijnan Chakraborty| Ensemble Learning | Aug '24 –Sept '24

- Preprocessed a dataset of **30k** records and utilized **Seaborn** for visualization, analysis, and model comparison.
- Implemented an ML classifier using custom **Naive Bayes** and scikit-learn models (**SVM**, **KNN**, **Decision Tree**).
- Engineered a custom **majority-vote ensemble** framework, achieving **83%** final system accuracy.

COURSEWORK INFORMATION

Machine Learning | Data Analytics | Algorithm Design & Analysis | Database Management System | Data Structures | Operating System | Deep Learning | High Performance Computing Architecture

SKILLS AND EXPERTISE

Languages &Tools :C/C++,Python,SQL,Jupyter Notebook/Kaggle, Postman, Visual Studio, GitHub.

Libraries/Frameworks : Pandas, Numpy, Matplotlib, sckit-searn, PyTorch, NLTK, C++ STL,seaborn.

ML Techniques : Regression, Clustering, SVM, Decision Tree.

AWARDS AND ACHIEVEMENTS

- Secured **AIR 267 (99.78 percentile)** in **GATE 2024**, also qualified in 2022, 2023 and 2025.
- Secured **International Rank 6722** in SOF National Science Olympiad.
- Database Management Essentials** by **University of Colorado** from Coursera.

POSITIONS OF RESPONSIBILITY

Programming & Data Structures Tutorial and Laboratory (PDS) CS19001

- Conducted tutorials on PDS basics and graded assignments for a class of 205 students.

EXTRA CURRICULAR ACTIVITIES

- Swimming: Secured 1st in 200m IM and 2nd in 400m freestyle at the KVS Regionals.
- Learning and understanding about Geopolitical Affairs.