

Jaideep Singh

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Integrated Master of Science

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🔗 GitHub Profile

🌐 LinkedIn Profile

EDUCATION

•Integrated Master of Science in Applied Mathematics

Indian Institute of Technology, Roorkee

2020-25

CGPA: 7.314

PERSONAL PROJECTS

•AI Chatbot

A news research tool for equity analysts, implemented as an AI chatbot using Langchain and Streamlit.

- Assisting analysts by providing accurate and relevant information from news sources.
- Implemented OpenAI API for generating responses and FAISS for vector-based retrieval of news articles.
- Technology Used: Python, Langchain, Streamlit, OpenAI API, FAISS.

•Crop Recommendation System

A crop recommendation system implemented as a fully functional Django application

- Developed Logistic Regression, Naive Bayes, and KNN models, achieving an ensemble accuracy of 94%.
- Generated artificial data for various crops to enhance model performance.
- Technology Used: Python, Django, scikit-learn, Pandas, NumPy.

•Enhanced Secret Sharing Scheme Using Cryptography

A doubly secured data confidentiality system developed using Python's PyCrypto toolkit.

- Implemented encryption algorithms, including DES, 3DES, AES, ARC4, and CAST128, alongside Shamir's Secret Sharing Scheme.
- Technology Used: Python, PyCrypto, Cryptography, Mathematics.

EXPERIENCE

•Backend Development Internship

May - July 2024

Nahar Om Group

Online

- A dynamic discounting module designed and integrated into a loan management system for enhanced data visualization and analysis.
- Engineered the module from the ground up using Django, enabling the calculation of dynamically changing interest rates.
- Collaborated closely with a team of web developers and integrated the developed code into repositories.
- Technology Used: Python, Django, Data Visualization, Version Control Systems.

•Web Scraping Internship

Jan - Feb 2023

Skillvoid

Online

- A web scraping algorithm developed and optimized targeting Watchoutinvestors.com to enhance loan application flagging.
- Improved algorithm efficiency by 20x and achieved 97% accuracy in identifying companies with directors involved in defaults.
- Technology Used: Python, BeautifulSoup, FuzzyWuzzy, Data Processing.

TECHNICAL SKILLS AND INTERESTS

Languages: Python, C++

Libraries : Scikit-learn, TensorFlow, Python Libraries

Tools: Power BI, Jupyter Notebook, PyCharm, VS Code, Git, GitHub

Frameworks: Django

Databases: MySQL

Relevant Coursework: Machine Learning and Deep Learning Specialization (Coursera) by Andrew NG, International Winter Training Course Nature Inspired Optimization Techniques.

Areas of Interest: Machine Learning, Deep Learning, Generative AI.

Soft Skills: Problem Solving, Self-learning, Presentation, Adaptability.

POSITIONS OF RESPONSIBILITY

•Co-Coordinator Thomso IITR 2022

Oct 2022

- Spearheaded a team of 4 in the Controls and Management section of Thomso IIT Roorkee 2022.
- Streamlined registration process of over 3000 participants.