

Nunavath Nithish Kumar

UG (IV Year I Semester)

B.Tech. (Metallurgical & Materials Engineering)

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Area of Interest

Data Science, Machine Learning, Generative AI

_____ Education

Year	Degree/Examination	Institution/Board	CGPA/ Percentage
2024	B.Tech. 3rd Year	Indian Institute of Technology, Roorkee	7.016
2021	Intermediate (Class XII)	Pinegrove Junior College	96.40 %
2019	Matriculate (Class X)	Green wood High School	86.00 %

Internships

Generative Al Intern | Pluto

April 2024 - Iuly 2024

- Developed and deployed an advanced conversational AI chat engine using Flask and OpenAI API on Google Cloud Platform (GCP), leveraging Llama Index for efficient document indexing and query optimization.
- Designed and deployed three robust API 3 for various functionalities within the Engine on Google Cloud Platform (GCP), ensuring seamless interaction, data exchange, high availability, scalability, and reliability of the service.
- Implement algorithms for contextual query refinement using past chat history and natural language processing, enhancing query clarity and relevance.
- Integrated Google Gemini for embedding and generative content, alongside proprietary AI models, and managed vector stores and sentence splitting for effective information retrieval.
- Enhanced user interaction with functionality to detect and respond with relevant affiliate links and source references, ensuring focused and informative tech-specific responses

Data science Intern | Exposys DataLabs

June 2023 - July 2023

- · Created data visualization graphics, translating complex data sets into comprehensive visual representations.
- Developed and established strong business relationships with both internal personnel and external solution providers.
- · Developed and implemented profit prediction model using administration cost, marketing spend, and R&D expenses
- data to forecast business unit profitability and support strategic decision-making.

Projects

Pairs Trading Algorithm for Financial Markets | Finance Club, IIT Roorkee

May 2024 - June 2024

- Developed a pairs trading algorithm using statistical arbitrage principles, implementing data collection from Yahoo Finance and cointegration analysis to identify tradable asset pairs.
- Designed and implemented a trading strategy with z-score-based signal generation, position management, and risk control mechanisms.
- Conducted in-depth performance analysis, calculating key metrics such as total return, Sharpe ratio, and maximum drawdown to evaluate strategy effectiveness

Product Recommendation Analysis | ArIES , IIT Roorkee

January 2024 - February 2024

- Created a Quarterly Sales Forecasting Dashboard using Tableau for state-wise sales and profit analysis
- Developed Popularity and Collaborative Recommendation Systems using Python NLP models
- Provided data-driven insights and recommendations for business growth and market optimization

Customer churn Analysis | ArIES , IIT Roorkee

March 2024 - April 2024

- Conducted end-to-end customer churn analysis for Dollar Bank using SQL, Python, and Tableau
- · Created an interactive Tableau dashboard highlighting key metrics, customer demographics, and churn patterns
- Provided data-driven recommendations to reduce overall churn rate, focusing on retaining established customers and specific demographic segments

$\textbf{Job Recommendation System} \mid \mathsf{ArIES} \ , \ \mathsf{IIT} \ \mathsf{Roorkee}$

February 2024 - March 2024

- Developed a machine learning-based job recommendation system using data scraped from Glassdoor
- Implemented TF-IDF vectorization and Nearest Neighbors algorithm for personalized job matching
- Created a user-friendly Streamlit application for resume upload and job recommendations

Skills

Computer languages Python, C++, ReactJS, JavaScript, SQL

Software Packages MS Excel, Power BI, Github, Jupyter Notebook, Numpy, Pandas, Matplotlib, Seaborn, VS Code,

Google Cloud Platform(GCP)

Languages Known Hindi(SRW) and English(SRW)

Positions of Responsibility & Extra Curriculars

• Led the marketing team, overseeing the development and execution of innovative marketing strategies for various events and initiatives at the Institute Innovation Council (IIC) of IIT Roorkee. Managed marketing campaigns to promote innovation and entrepreneurship within the institute. Collaborated with various teams to ensure effective communication of IIC's mission and activities through high-quality marketing content and strategies.

Technical Council Member | RADHAKRISHNAN BHAWAN, IITR

October 2022 - October 2023

- Handling and maintenance of feedback/data of hostel-related activities
- Designing content for hostel-level events
- Ensure network connectivity communication between students and authorities

Mentor | Student Mentorship Programme, IIT Roorkee

September 2023 - Present

• Mentored and guided 10 first-year students, offering academic, career, and personal support. Created positive Environment, resulting in improvements in mentees' academic performance and personal development. Developed leadership, communication, and problem-solving skills through experience, overcoming challenges effectively.

Web Developer | WELLNESS IITR

April 2023 - Present

• Cooperated as part of the Web development team of a group comprising 80+ members of Wellness Centre, a group that helps maintain college students social well-being and provides counseling to students to resolve their problems Leading the Web Development team and managing the group's two most crucial apps to help 10,000+ students with their social, personal, or academic problems in their day-to-day life - The Counseling portal for managing counseling sessions and the Stac portal for managing student applications for financial support.

References

K.S. Suresh Assistant Professor MMED, IIT Roorkee ks.suresh@mt.iitr.ac.in