

GORAM ANIL NAYAK

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EDUCATION

Indian Institute of Technology, Kharagpur

Dual Degree of B.Tech (Honors) and M.tech- Mechanical Engineering; CGPA: 8.29

Kharagpur, India

July 2017 - June 2022

Narayana Junior College

Telangana State Board of Intermediate Education; Percentage: 98.5

Hyderabad, India

July 2015 - June 2017

St.Antony's high school

Telangana State Secondary School Certification; CGPA: 9.7

Sangareddy, India

Completion - June 2015

PROFESSIONAL EXPERIENCE

Operations Research Analyst, Laminaar Aviation Infotech, Bangalore, India

July 2022 - present

- Worked on Enhancing Crew Rostering Optimizer (CRO) module, which is part of Airline Resource Management System (ARMS)
- Achieved near-optimal result in CRO with **20%** reduction in crew scheduling costs through compact and moving-window heuristics.
- Integrated **reserve assignment**, long reserve assignment, and long reserve priority in CRO module as per Business Requirements.
- Handled distribution and horizontal rules of reserve in the CRO module, leading to a **30%** increase in, efficient resource allocation.
- Improved the overall system efficiency by **5 percent** and aligned key performance indicators through two solution engine phases.
- Implemented **East-West Restriction** requirement and optimized Vertical constraints in CRO, resulting in a more compact model.

PROJECTS

Stock Market Algorithmic Trading Application

Jan 2023 - present

- Architected an algorithmic trading platform, employing **PostgreSQL** as database and leveraging **FastAPI** as the back-end server.
- Integrated AngelOne SmartAPI's **WebSocket** to fetch real-time tick-by-tick data and used yfinance library for historical data.
- Implemented operations research techniques to generate **trendlines**, dynamically plotted on UI, enabling data-driven stock analysis
- Developed **real-time trade** execution functionality, incorporating user-pre-defined conditional trades with precision and efficiency.
- Designed and developed a responsive and user-friendly Front-end using **React.js**, Bootstrap, and TradingView light-weight charts.

Developed And Deployed Two PERN Stack Applications

Feb 2023 - April 2023

- developed a fully functional restaurant review platform from scratch, utilizing **PERN** (PostgreSQL, Express, React, Node.js) stack.
- Created a feature-rich to-do list application using PERN stack with **CRUD** functionality. empowering users to boost productivity.
- Deployed these applications on **AWS EC2** instances, leveraging **Nginx** api gateway for seamless performance and accessibility.
- Experience the functionality of the applications through the following links [Trading App](#), [Todo-App](#), [Restaurant Review App](#).

RELEVANT SKILLS

Languages: C | C# | Python | JavaScript | HTML | CSS | SQL | MATLAB

Web Technologies: Node.js | React.js | Express.js | FastAPI | Django | Restful APIs | BootStrap

Database: PostgreSQL | MySQL | MongoDB

Developer Tools: Vs Code | Git | AWS EC2 | Postman | Nginx | Airflow | Docker

POSITION OF RESPONSIBILITIES

Captain | Hockey Team | Vidyasagar Hall of Residence - IIT Kharagpur

Jan 2020 - March 2022

- Led the Hockey team to secure a **bronze** medal in the highly competitive 65th Inter-Hall General Championship, IIT Kharagpur.
- Effectively organized practice sessions by coordinating with a team of 16 players and diligently tracking their progress regularly.

Secretary | Sports and Games | Vidyasagar Hall of Residence - IIT Kharagpur

June 2018 - March 2019

- Elected by an electorate of 332 boarders to lead Hall's effort to compete in the Sports and Games, General Championship.
- Managed an annual budget of INR 2,17,000/- allocated for sports activities aimed at the success of the General Championship.

EXTRA CURRICULAR ACTIVITIES

- Contributed to the development and promotion of the sport among students, as Part of the **NSO** - football at IIT Kharagpur.
- Coordinated in organizing COVID-19 vaccination drive for 3000+ campus residents during 2nd wave of the coronavirus pandemic.
- Actively participated in interhall sports, Illumination, and Open IIT Sketching, showcasing competitive spirit and artistic talents.

AWARDS AND ACHIEVEMENTS

- Secured rank **64** and **44** respectively in Joint Entrance Examination Advanced and Mains - 2017, among **1.18** million applicants.
- Secured Rank **534** in Engineering Agricultural and Medical Common Entrance Test-2017., among **0.22** million applicants.