

EDUCATION

Birla Institute of Technology and Science, Pilani

BE (Hons.) in Computer Science and MSc (Hons.) in Mathematics - CGPA: 8/10

Hyderabad, India Aug 2020 - May 2025

Experience

Model Risk Quant (Wealth Management) Intern

July 2024 - Dec 2024

Morgan Stanley Advantage Services (Skills): Statistics, Finance, Text Analytics, Risk

Mumbai, Maharashtra

- Implemented model on manager selection for US equity mutual funds using XGBoost and Natural Language Toolkit
- Privileged the use of Black-Scholes and Barone-Adesi and Whaley models for employee stock options model which will be utilized by multiple teams.

Data & Analyst Intern

May 2023 - Aug 2023

Sonata Software Ltd. (Skills): Matplotlib, Analytics, Visualization, AI/ML

Bangalore, Karnataka

- Worked on predicting agricultural yields by **analyzing satellite imagery** along with historical soil and weather data.
- Used **ETL** and **data preprocessing** techniques to improve **data quality** by filtering out satellite images with cloud cover. Applied machine learning models like **Regression** and **Artificial Neural Networks**.

Research Intern May 2022 - Sep 2022

CSIR - CEERI Lab (Skills): Python, OpenCV Link

Chennai, Tamil Nadu

• Innovatively designed a **yawn detection** algorithm using advanced **image processing** techniques, contributing to **driver drowsiness detection** research. Provided **better results** than the state-of-the-art models.

PROJECTS

Property Rental Management System | Database Systems

Oracle SQL, PL/SQL, Relational Database, Linux

Link

- Designed and implemented Oracle database for seamless interactions among owners, tenants, managers and DBAs.
- Authored intricate PL/SQL scripts for adding, deleting, updating property records and querying property status using unique identifiers.

VaR Modeling and Risk Analysis for Multi-Currency Portfolio | Self Project

Python, Finance, Statistical Analysis and Modeling, Data Visualization

Link

- Applied financial concepts including **Monte Carlo simulation** to analyze portfolio risk. Quantified risk-return by calculating **expected returns** and **correlation coefficients**.
- Conducted historical analysis and BootStrap VaR. Incorporated statistical measures such as skewness and kurtosis.

Waiting Time Prediction in Queuing Systems using Machine Learning Algorithms | Operations Research

Numpy, Pandas, Deep Learning, Presentation, Communication, Team Work

Link

• Utilized the Scikit-learn framework to develop the MLPRegressor model, for accurately predicting customer waiting times in bank queues. Proposed solutions to an audience of 82 students.

Banking Management System | Self Project

C++, OOP, Data Structures, Algorithm Development, Problem-Solving, Finance

Link

- Implemented LinkedList and Queues. Users were leveraged to deposit/withdraw cash and open/view their accounts.
- The users in **ATM section** are leveraged with withdraw cash and balance enquiry functionalities. The **administration** could view the bill payment queue.

Extracurriculars/Achievements

Undergraduate Teaching Assistant (2024) — Database Systems and Object Oriented Programming: Responsible for creating Java and SQL lab sheets with step-by-step solutions for over 300 students.

INSPIRE Scholarship (2020-2025): Awarded by the Maharashtra State Board for being among the top 1% performers in Class XII across the state.

Recreational Activities Forum President (Present): Managed events with footfall of more than 600 students.

AUGSD Head(2022-2023):Led the operations of course registration and project allotment for 1000 students.

Head Boy (2017-2018): Managed and hosted school events. Innovated by introducing the 1st school magazine.