

EDUCATION

Degree/Certificate	Institute/Board	CGPA/Percentage	Year
M.Tech. Management Sciences	Indian Institute of Technology, Kanpur	-	2026-2028
B.Tech. Civil Eng.	Jawaharlal Nehru Technological Uniersity, Hyderabad	8.1	2019-2023
Senior Secondary	Telanagana State Board Of Intermediate Education	97.5%	2019
Secondary	Board of Secondary Education, Telangana	9.5	2017

PROJECTS

Predictive maintenance for industrial equipment

Self Project

- Used a **Random Forest model** to predict the Remaining Useful Life (RUL) of the industrial equipment from sensor data.
- Achieved an **MSE of 224.0584** and **R² score of 0.6710** supporting proactive maintenance decisions for it's better use.
- Identified **hours since last maintenance** as the most influential predictor of degradation followed by **RPM** and **stress**.

 Aug'26

Statistical Modeling of Diamond Prices

Self Project

- Performed **exploratory data analysis** and **data preprocessing** on a dataset of **53,940 diamond records** .
- Applied **One-Hot Encoding** and developed a **Multiple Linear Regression** model for diamond price prediction.
- Validated model assumptions** using residual analysis, **Q–Q plot**, **Variance Inflation Factor (VIF)**.
- Also implemented **Durbin–Watson test** to assess normality, multicollinearity, and independence of residuals.
- Achieved **R² = 0.92**, **MAE = \$726**, **RMSE = \$1,136**, demonstrating high predictive accuracy.

 July'26

Medical Insurance Cost Analysis using OLS Regression

Self Project

- Analyzed **1,338** insurance records in **Python** to identify key demographic and lifestyle drivers of medical insurance charges.
- Cleaned and preprocessed data with **Pandas**, including feature engineering, categorical encoding, and outlier correction.
- Applied statistical tests (**Shapiro-Wilk**, **Mann-Whitney U**, **Kruskal-Wallis**) to validate key relationships with charges.
- Built an **OLS regression model** with smoker-BMI interaction, improving **R² from 0.70 to 0.84** and cutting **RMSE by 27%**.
- Tested significance of each feature using **statsmodels**, finding that 6 of 10 are significant at p < 0.05.
- Evaluated final model performance using **R²**, **RMSE**, and **MAE** on a held-out test split.

 July'26

FedEx Logistics Performance Analysis

Self Project

- Analyzed **10000 logistics records** with **33 features** using **Python**, **Pandas**, **Matplotlib**, and **Seaborn**.
- Preprocessed data by handling missing values, converting 5 date fields, standardizing data types. (July 2026).
- Analyzed shipment performance across **43 countries**, **73 vendors**, and **5 shipment modes** to identify operational trends.
- Created **data visualizations** to analyze freight costs, shipment value, insurance, and delivery performance.
- Generated **actionable insights** to support vendor evaluation, logistics optimization, and transportation cost reduction.

 June'26

WORK EXPERIENCE

A.S.A Consultancies, Hyderabad

(Internship) May'22 – June'22

- Designed structural components including footings, columns, slabs, and other building elements.
- Developed detailed building layout drawings using AutoCAD software.
- Conducted material quantity estimation and prepared cost calculations using Microsoft Excel.

L&T Constructions, Navi Mumbai

June'22 – July'22

- Gained exposure to the Mumbai Trans Harbour Link (MTHL) project.
- Officially known as the Atal Bihari Vajpayee Sewri–Nhava Sheva Atal Setu, a landmark infrastructure project connecting Mumbai and Navi Mumbai and recognized as India's longest sea bridge.

COURSEWORK AND SKILLS

Relevant Courses – Introduction to **Computing*** | **Operation Research** for Management* | **Probability & Statistics*** | **Image Processing***
Technical Skills – **C - Programming** | **Python***- **ScikitLearn**, **Tensorflow**, **Pytorch** | Data Analysis | **Machine and Deep Learning*** | **SQL***
Others – MS-Office | AutoCAD | LaTeX | STAAD.Pro

CERTIFICATIONS & EXTRACURRICULARS

- Introduction to Deep Learning** Neural Networks with keras by IBM
- Mathematics for Machine Learning: PCA** by Imperial College of London
- Foundations: Data , Data, Everywhere** by Google
- Won 1st prize in an elocution competition organised by the government of Telangana.
- Secured state 3rd rank in Dr JV Rao Talent test
- Full time coordinator at Street Cause Eforce, Hyderabad, from Aug 2020 - Aug 2021