

OCEAN ENGINEERING AND NAVAL ARCHITECTURE





EDUCATION

Year	Degree/Exam	Institute	CGPA/Marks
2021	M.TECH	IIT Kharagpur	8.79 / 10
2018	B.Tech	Indian Maritime University, Visakhapatnam	8.62 / 10
2014	All India Senior School Certificate Examination	Park Mount Public School	82.2%
2012	Indian Certificate of Secondary Education Examination	St. Thomas School, Godda	85.42%

PROJECTS

An Operational Statistical Scheme for Tropical Cyclone-Induced Rainfall Forecast (Ongoing)

- Preparing a study to analyze and predict short-term rainfall due to tropical cyclones in the eastern coast of India.
- •The outcome involves short-term prediction of rainfall intensity and duration from landfalling tropical cyclones for effective emergency preparedness.
- •The study requires knowledge based skill in data analysis and relevant mathematical tools.

Data preprocessing and Feature engineering for Machine Learning(Housing Dataset)

- •Inspection of data, cleaning data and creating additional features.
- Advanced explanatory data analysis with seaborn.
- Selecting appropriate ML model (Prepare/engineer features, fit the model, test the model).
- Choosing Random Forest Regressor. Use of packages such as numpy, pandas, scikit learn, Matplotlib etc.

Explanatory Data Analysis and Visualization(Baby names data set)

- •Collection of names from Data.GOV and merging them all into one dataset.
- •Inspect, clean the data and use visualization tools for finding insights on the data.
- •Finding out the trends in name over the years, most popular names of all times, reasons for sudden splike in popularity of few names etc.

Covid-19 impact on world and the economy using data visualization.

- •Using the raw dataset, clean it and use data visualization tools to get an insight on the data.
- Finding out how it has impacted different countries in terms of cases, deaths, mortality rate, HDI, population growth, effect of strict measures, unemployment rates etc.

Credit Card fraud detection model.

- •Load packages, read the data, check missing data and data imbalance.
- Models used for prediction
- Random Forest Classifier-ROC.AUC score-0.85
- AddBoost classifier- ROC.AUC score- 0.83
- CatBoost Classifier-ROC.AUC score- 0.86
- XGBoost classifier-ROC.AUC score-0.97

SKILLS AND EXPERTISE

Technical: Python, SQL, R, C++, Machine Learning, MS Office, AutoCAD

Coursework Information : Programming and Data Structures, Machine Learning, Python(programming language)

CERTIFICATIONS

- Volunteered in college magazine, La Ola, and published articles in year 2014-2015.
- •Secured 1St position in Inter-House Table Tennis (Singles), held in Indian Maritime University (2016-2017).
- Participated in Youth affairs and Social Service activities, and completed 240 hours of Social service under National Service Scheme during 2014 to 2016.

WORK EXPERIENCES

Project Associate | Indian Institute of Technology, Madras | March 2019 - June 2019

- Worked as a Project Associate in the project on Controllability of Ships in Harbour and Navigational Channels, administered by Centre for Industrial Consultancy & Sponsored Research (IC&SR) in the Department of Ocean Engineering, IIT Madras.
- •The work mainly involved conducting in-depth parametric analysis and prediction of resistance, trim and sinkage of vessel through a channel with varying underwater topography.