

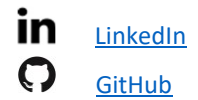


NEELANSH VERMA | 18IM10016

MAJOR- INDUSTRIAL ENGGINEERING

MINOR – COMPUTER SCIENCE & ENGINEERING

vermaneelansh2001@gmail.com | +91 9027184464



EDUCATION

| Year | Degree/Exam | Institute | CGPA/Marks |
|------|---|-----------------------|------------|
| 2022 | B. TECH (Hons.) | IIT Kharagpur | 8.79 / 10 |
| 2018 | All India Senior School Certificate Examination | KCM School, Moradabad | 93.6% |
| 2016 | All India Secondary School Examination | KCM School, Moradabad | 10 / 10 |

SKILLS AND EXPERTISE

Languages: Python | C | C++ | JavaScript | jQuery | CSS | HTML | AJAX | PHP

Software and Frameworks: IBM Optimization Studio (CPLEX) | ReactJS | React-Redux |

Libraries: Keras | NumPy | SciPy | Matplotlib | Pandas | Tkinter | Sklearn | OpenCV | Pytorch

INTERNSHIPS & KEY PROJECTS

REACT JS INTERN | BREAKOUT PVT. LMT

Jan 2021 – Feb 2021

- Developed the **Kanban view** from scratch for the process management platform facilizing the instance view using **react-trello and antd**.
- Integrated the Kanban view as well as **tasks creation of the platform** to the backend and APIs using **react and react-redux** framework.
- Enhanced and customized the **graphic user interface**, carried out testing and bugs removal of various features present in the platform.

Electricity Power Consumption Predictor | GC-Data Analytics | Statistical Modelling

Jan 2020 – Feb 2020

- Derived the model to predict the power consumption of the last four months on the basis of the readings of **first 8-months**.
- Carried out various data-preprocessing and analysis measures including **ACF and PACF** plots to analyze the time series present in the dataset and carried out **seasonal decomposition** in order to remove the seasonality and noise from the time series of the given data set.
- Successfully implemented the **SARIMA, ARIMA** and then applied the **LSTM** model in order to minimize the binary cross entropy loss.

COVID-19 Chest X-RAY Image Classifier | Course Project Deep Learning

May 2020 – June 2020

Center of Excellence in Artificial intelligence, IIT Kharagpur

- Searched the possibility of alternate testing facility that will differentiate the **covid-19 positive** and **pneumonia** patients from the remaining set of peoples on the basis of their **chest x-ray images** for which we have created a **convolutional neural network**.
- Successfully removed the **class imbalance** by proportionate selection and data augmentation along with normalization, regularization and drop-out to deal with the overfitting of the network and applied 5-fold validation in order to minimize the binary cross entropy loss.

Credit Card Fraud detection using Genetic Algorithm | Course Project Genetic Algorithms

April 2020 – May 2020

- Predicted the credit worthiness of the customers and their defaulting tendency given their borrowing payment information through classification models like random forest and **XGBOOST** by assigning them different classes and achieved the accuracy of **95%**.
- Converted the tuning of **hyperparameters** of both the models into an optimization problem and implemented **genetic algorithm** that includes selection, crossover, mutation onto it resulting in improving the accuracy of the classification model from **95% to 96.8%**.

COMPETITIONS

- CASCADE CUP 2020 | IIT GUWAHATI:** Cleared Round 1(Machine Learning Quiz) . In Round – 2 built a **multi-stage Classifier** to predict the age group of user based on YouTube data(followers, count, Emoji, count etc.). In Round-3, performed **Exploratory Data Analysis** to find the reason for absenteeism at work. Bagged **40th Rank** among more than 2000 participants.
- PREDICT THE LOWEST PRICE FOR THE BIGGEST SALE DAY | HACKEREARTH:** Performed preliminary data preprocessing, engineered new features, implemented various machine learning models like **SVR, Random forest, Xgboost**, enhanced the performance of the model using various optimization techniques and secured **47th Rank**.

COURSEWORK INFORMATION

- Relevant Courses:** Programming and Data Structures | Design and Analysis of Algorithms | Probability and Statistics | Linear Algebra | Deep Learning foundations and its application | Information Systems | Operation Research -1 | Operation Research-2 | Genetic Algorithms and its application | Economics

EXTRA CURRICULAR ACTIVITIES

Member, Data-Analytics TEAM, Vidyasagar Hall Of Residence IIT Kharagpur

- Worked in the team of 9 members in order to compete in the inter hall general championship of data analytics IIT Kharagpur.