

ACADEMIC DETAILS			
YEAR	DEGREE	INSTITUTE	CPI/%
2020-Cont.	M.Tech. (Industrial & Management Engineering)	Indian Institute of Technology, Kanpur	7.26*
2010-14	B. Tech (Mechanical Engineering)	University College of Engineering Punjabi University, Patiala	7.37
2009	Class XII Bihar State Board	A.N. College, Patna	60.8%
2006	Class X Bihar State Board	Mahadev High School, Khushrupur	78.5%

*up to 2nd sem

WORK EXPERIENCE (6 Years 4 months)

EduNova Education Training and Research Limited, Ahmedabad, Rajkot (May'2014-Sep'2018)

- Faculty of **Physics** for **JEE-advance** and **Physics Olympiad** Entrance Examination
- Started **Super 60 Batch** and all students successfully achieve good All India Rank in their respective Entrance examination's
- Took a Lead Role in the **Expansion** of the organization and opened four new Centers Across the different city
- Prepared Physics Study Material and a wide range of course design, lesson planning, instruction, and classroom
- Oversaw the daily operations of the institute like student-parent **counselling**, **student academic performance**, **Seminar**, **H.R. management**

Ice Technology Lab Private limited, Patna (Jul'2019-Jul'2021)

- Managed Skill **development** program to upskill state government engineering college student
- Managed **seminar** and **Counselling** activity

INTERNSHIP

Research intern at BrainAlive Pvt Ltd (May'21-July'21)

Literature Review to brief about the technique behind human Gaze estimation to help organization ongoing project based on real-time eye-tracking

- Studied 50+ different research articles published in the last 15 years in the field of **Human gaze estimation** and **Real-time Eye-tracking**
- Obtained a deep understanding of gaze tracking fundamentals (**Fixation, Scanpath, Saccades, Gaze duration** Etc.), eye gaze tracking methods (such as **PCCR model-based methods, appearance-based methods**), various **CNN**-based architectures (**VGG-16, AlexNet, RESNET, GazeNet, Spatial weights CNN architecture** Etc.), the paradigm of collecting data, real-time applications, Etc.
- Prepared a **comparative literature review** discussing gaze tracking fundamentals, feature extraction, methodologies to estimate gaze, calibration devices and platforms, accuracy in different real-world circumstances, real-time applications in various domains and future scope

ACADEMIC PROJECTS

Credit Risk and Fraud detection (Data Mining and Knowledge Discovery) (Oct'20-Nov'20)

- Dataset is highly imbalance contain 284,807 transactions with 35 features out of 492 are Fraud's
- Perform **Explanatory Data Analysis (EDA)**, **Data Preprocessing** and **Data visualization**, Class imbalanced data handled by **SMOTE** and Used **Accuracy Precision, Recall and F1-Score** as metrics to compare model.
- Applied **Logistic Regression, Random Forest** and **Decision tree** with sampling Best Model are **Random Forest**.

Forecasting of co2 emission due to electric generation in the USA due to natural gas consumption (Time Serries Modelling) (Jan'21-Mar'21)

- Checked for **stationarity, trend, seasonality** using **ADF-test** (Augmented Dickey-Fuller), **KPSS-test** and variance in data with **Rolling Mean, log transformation**
- **Decompose the plot** and Time-series made **stationary** by **Differencing(d)**, **RMSE** and **MAPE** used for evaluation metric.
- Use **Simple Exponential Smoothing, Holt's winter Additive Seasonal** and **SARIMA** Models for forecasting, Initial Appropriate of **SARIMA (2,1,0) x (0,1,1,12)** (use Grid search to find best parameters), the best model with RMSE value is **Holt's winter Additive Seasonal Model** with **RMSE 6.0242**

Mall Customers Segmentation (Applied Machine Learning) (Feb'21-Mar'21)

- Dataset include 200 datapoints with 5 column features-customer-ID, Gender, Age, Annual Income, Spending Score
- Techniques used: **K-Means, Affinity Propagation and DBSCAN**, Use **Elbow** and **Silhouette Method** to find optimum cluster number
- Four cluster group is Aggregate namely: Usual Customers, Priority Customers, Senior Citizen Target Customers, Young Target Customers

Analyze the Factors Affecting Sales Price of House in King County, USA (Statistical Modelling for Business Analytics) (April'21-June'21)

- The dataset contains **19** house features, including the **price** (dependent variable), along with **21613** observations
- Did **multivariate statistical regression analysis**, EDA and checked **Multicollinearity** by VIF & correlation matrix, **Breusch-Pagan test** showed heteroskedasticity
- Built **linear regression** models, Used **Backward elimination approach** and finalized a model with **Adjusted R2** without and with robust error was **0.676& 0.694**

Telecom Customer Churn Prediction (Statistical Modelling for Business Analytics) -Self Project (April'21-June'21)

- The dataset contains 7043 rows (customers) and 21 features Such as" tenure", "online security", "paperless billing, Etc.
- Performed **EDA**, Correlation matrix, applied **SMOTE** to balance the data and **RFE** to select the 15 significant features in the baseline model's
- **Logit** and **Probit** models were used to classify the Churn class, dropped features based on **p-value** and **VIF**.
- Logit showed better results as the **accuracy** of about **79%**, the **precision** of **73.8%** and a **recall** of **62.4%**, **AUC** of **ROC** curve was **0.83**

COURSEWORK AND SKILLS

Academic Courses	Data Mining Probability & Statistics Applied Machine Learning Time Series Modelling for Business Analytics Software Project Management Business Management using cloud Advanced Statistical Methods for Business Analytics Operation Research
Skills	Data Structure and Algorithm PYTHON ((NumPy, Pandas, SciPy, Sci-kit Learn, Seaborn, Matplotlib, Statsmodels) Machine Learning Natural Language Processing Statistical Analysis SQL Power B.I. Deep Learning (Beginner) M.S. Excel (basic)

ACHIEVEMENTS AND CERTIFICATIONS

- Secured **AIR 11** in **GATE 2018(XE)** with 99.68 percentile
- Secured **1st pos** in **QUIZ-O-MANIA** inter University Tech Fest organized by Chandigarh University
- Secured **2nd pos** in **DISCIPLES OF ATHENA** inter University Tech Fest **RUNBHOOMI** organized by Punjabi University Patiala
- **SQL** for Data Science (hands-on learning with assignments)-Udemy
- **POWER BI** for Data Analysis (hands-on learning with assignments/projects and create a **Dashboard** with **Retail Store dataset**)-Edu4Sure

POSITION OF RESPONSIBILITY

- **lab in-charge** at **IME Department IIT Kanpur**- Managed and assisted students in issues related to software and biometric authentication (Sep'20-present)
- **Teaching Assistant – Project Management (course)** Managed and provided support to 20 students and administered exams (Jul'21-present)