

## ACADEMIC QUALIFICATIONS

Year	Degree /Board	University /Institution	%/CGPA
2025*	Post Graduate Diploma in Business Analytics	IIM Calcutta, IIT Kharagpur, ISI Kolkata	-
2021	B.Tech Electrical Engineering	Indian Institute of Technology, Roorkee	7.48/10
2017	CLASS XII	Air Force Bal Bharati School	94.6 %
2015	CLASS X	Air Force Bal Bharati School	10/10

**KEY SKILLS/TOOLS** Predictive Modeling, Data Visualization, Statistical Inference, DSA, Problem Solving, Python, Power BI

## WORK EXPERIENCE (23 Months )

Fractal Analytics	Imagineer	Mumbai (Jul '21 - Jun '23)
Project	<ul style="list-style-type: none"> <li>Led <b>8+ studies</b> based on <b>User Behaviour Analytics</b>, managing the setup, execution, closing and deliverables</li> <li><b>Automated</b> data ingestion, manipulation, wrangling &amp; validation using <b>python</b>, reducing time taken by <b>50%</b></li> <li>Used fundamental <b>statistical techniques</b> to flag user <b>anomalies</b> and raise <b>data quality</b> &amp; compliance issues</li> <li>Developed <b>PowerBI dashboards</b> and Excel reports to analyse the performance of <b>100+ SKUs</b> in <b>4+ markets</b></li> </ul>	
Responsibilities	<ul style="list-style-type: none"> <li>Collaborated with <b>global clients</b>, leading calls, aligning targets and closing the business tasks independently</li> <li><b>Mentored</b> and <b>upskilled</b> juniors, supported the team as an <b>SME</b> in Python and PowerBI whenever required</li> </ul>	

## INTERNSHIPS (2 Months )

JP Morgan	Software Developer Intern	Mumbai (May '20 - Jun '20)
Internship Project	<ul style="list-style-type: none"> <li><b>Developed app</b> to convert <b>ISL to English</b> &amp; vice-versa, bridging communication gap for the deaf community</li> <li>English – ISL: Used <b>NLP</b> to convert English sentences into ISL &amp; then play pre-recorded videos for each word</li> <li>ISL – English: Applied <b>Encoder – Bi-LSTM</b> network to generate English sentences from pre-processed videos</li> </ul>	

## AWARDS AND ACHIEVEMENTS

Academics	<ul style="list-style-type: none"> <li><b>Ranked</b> in the <b>Top 10 percentile</b> of academic performers amongst the 62 students of PGDBA 2023-25 Batch</li> <li>Achieved <b>AIR 1457</b> in JEE Main, <b>AIR 1665</b> (99.1 %ile) in <b>JEE Advanced '17</b>   Achieved <b>99.67</b> %ile in XAT '23</li> </ul>
Case Competitions	<ul style="list-style-type: none"> <li><b>Rank 4/980</b> in Scytale (World Bank data analysis) IIM Ranchi   <b>Rank 5/940</b> in IDB-Analytics by IIM Calcutta</li> <li><b>Rank 5/424</b> in <math>\mu</math>-lytics, Attrition (HR Analytics) based case competition, hosted by Masters' Union, Gurgaon</li> </ul>
Certifications	<ul style="list-style-type: none"> <li>Completed <b>11-week</b> program in <b>Data Science, Analytics &amp; Data Engineering</b> by Fractal and Great Learning</li> </ul>

## ACADEMIC PROJECTS

Credit Risk Prediction (Classification)	<ul style="list-style-type: none"> <li>Predicted the probability of customer loan default for <b>15 lakh+</b> applications with <b>400+ attributes</b> in 32 files</li> <li>Performed data <b>aggregation</b>, <b>SMOTE</b> for class imbalance, feature engg; Trained <b>LGBM</b> and <b>CatBoost</b> models</li> <li>Created a weighted <b>ensemble</b> model using <b>soft voting</b> classifier; Achieved <b>AUC</b> score of <b>0.88</b> and recall <b>0.79</b></li> </ul>
Transaction Amount Prediction (Regression)	<ul style="list-style-type: none"> <li>Predicted total credit card transaction amount of users utilizing <b>MLR</b> models (applying <b>OLS</b>, <b>Lasso</b> &amp; <b>Ridge</b>)</li> <li>Performed <b>ANOVA</b> test, <b>t-test</b> for significance of predictors, <b>Chi-Square</b> &amp; <b>KS Test</b> for normality of residuals</li> <li>Used <b>PCA</b> to eliminate multi-collinearity; Analysed residuals using <b>Q-Q plots</b> and achieved <b>R<sup>2</sup> score</b> of 0.985</li> </ul>
LOS and NICU Stay Prediction	<ul style="list-style-type: none"> <li>Constructed a LOS &amp; NICU prediction model, using <b>130 attributes</b> about lifestyle &amp; demographics of mother</li> <li>Reduced no. of features to 30 using domain knowledge, <b>multicollinearity</b> analysis &amp; <b>clustering</b> via <b>KMeans</b></li> <li>Used <b>Naïve Bayes</b>, <b>Logistic Regression</b>, <b>XGB</b> for NICU; Improved accuracy to <b>86%</b>; Identified <b>top 5</b> features</li> </ul>
Matches Forecasting (Time Series)	<ul style="list-style-type: none"> <li>Forecasted number of football matches for the next 5 years using 80 years of data having <b>45k+</b> match results</li> <li>Performed time series decomposition, <b>ACF-PACF</b> plots for order of <b>SARIMA</b> and <b>Ljung-Box</b> test for residuals</li> </ul>
Extractive Text Summarization	<ul style="list-style-type: none"> <li>Performed Extractive Text Summarization on BBC News Dataset; Used <b>NLTK</b> &amp; <b>Universal Sentence Encoder</b></li> <li>Used <b>pagerank</b> algorithm to select <b>top-5</b> most important sentences &amp; fine-tuned <b>BART</b> to reorder sentences</li> </ul>
ECG based Human Identification (CNN)	<ul style="list-style-type: none"> <li>Developed <b>biometric authentication system</b> using ECG signal &amp; deep learning methods to identify humans</li> <li>Segmented ECG signals using <b>peak-detection</b>, removed unwanted frequencies using <b>Low &amp; High pass filter</b></li> <li>Used a <b>1-D Convolution Network</b> to classify the ECG signals. Achieved an accuracy of <b>99.61%</b> for <b>18 labels</b></li> </ul>
PII Detection (NLP)	<ul style="list-style-type: none"> <li>Given <b>6.8k essays</b>, built a classification model for detecting PII, automating manual masking of personal data</li> <li>Generated <b>PosTags</b> using <b>SpaCy</b>, tokenized using <b>BERT Tokenizer</b>; Used <b>RegEx</b> for identifying emails &amp; urls</li> <li>Employed <b>stacked</b> &amp; <b>ensemble DeBERTa</b> models to classify tokens, improving <b>F<sub>3</sub> score</b> from 0.695 to <b>0.953</b></li> </ul>
Image Captioning (Generative AI)	<ul style="list-style-type: none"> <li>Developed an <b>automatic</b> image captioning model using a <b>CNN - LSTM</b> based Encoder - Decoder architecture</li> <li>Applied <b>teacher-forcing</b> in LSTM to accelerate training and <b>Top-K Sampling</b> for diversity during generation</li> <li>Leveraged <b>Transfer Learning</b> to finetune <b>InceptionV3</b> &amp; <b>VGG16</b> models; Improved Rouge-L score by <b>5.3%</b></li> </ul>

## POSITIONS OF RESPONSIBILITY &amp; EXTRA CURRICULARS

Basketball	<ul style="list-style-type: none"> <li>Secured <b>3<sup>rd</sup></b> position in <b>Inter IIT Sports Meet</b> ['18]   Secured <b>3<sup>rd</sup></b> position in <b>Sangram-IITR sports meet</b> ['19]</li> </ul>
Data Sc. Casebook	<ul style="list-style-type: none"> <li>Devised Case Solutions and <b>KPIs</b> for <b>Finance</b> and <b>IT/ITES</b> industry in the 2<sup>nd</sup> version of PGDBA DS Casebook</li> </ul>

ELECTIVES : Bayesian Methods, Comp Fin, DL, FRM

INTERESTS : Puzzles, Reading, Football

