AMBUJ GAHOI



ACADEMIC QUALIFICATIONS				
Year		Degree /Board	University /Institution	%/CGPA
2025*	Post Gr	aduate Diploma in Business Analytics	IIM Calcutta, IIT Kharagpur, ISI Kolkata	-
2019	I	B.Tech Mechanical Engineering	Indian Institute of Technology Ropar	6.57/10
2015		CLASS XII	Mahatma Hansraj Modern School	95.2 %
2013		CLASS X	Rani Laxmibai Public School	94.67 %
KEY SKIL	LS/TOOLS	C++, Python, Pandas, SQL, Predictive N	Modeling, Time Series Forecasting, NLP, Tensorflow	w, Tableau
AWARDS	S AND ACH	EVEMENTS		
Academic Achievements		 Secured position in Top-10 %ile of PGDBA batch 9 Secured Top-2 grades in 16/17 courses graded till n Reached interview stage (among the top 0.50 %ile out of 1.5L+ aspirants) of the RBI Grade B exam (202 Achieved All India Rank of 4605 out of 1.6L+ aspirants (among top 3 percentile) in JEE Advanced (201 Scored 100/100 in Mathematics and Computer Science subjects in the ICSE 10th Board Examination 20 Ranked (2/385) in Networsify, trucks routing problem competition, worth Rs 30k organised by IIT Kgp' 		
Case Competitions		 Ranked (9/940) in IDB Analytics 3.0 interactive dashboard competition worth Rs 30k organised by IIMC National Finalist (6/352) in Datathon 2.0 loan default case competition worth Rs 16k organised by IIMC 		
NTERNS	SHIPS (2 M	onths)		
Tokyo Gas	S	AI Inter		
Deliv	verables	■ Achieved 180x decrease in computing ti	Institute Simulated the impact of active faults on k me of modeling an earthquake's impact on soil us g TOFD images of an underground pipeline with A	sing Discrete
ACADEM	IC PROJEC	TS		
Pre-Owned Car Price Prediction (Regression)		 Predicted price of pre-owned cars performed Exploratory Data analysis(EDA) to study features and outlie Performed One Hot Encoding, box-cox transforms for skewness and handled multicollinearity using V Implemented MLR & selected features with backward elimination; explored regularizations (Ridge & Lass Validated model using error analysis explored tree-based model(RF & XGB) & achieved best R² 0.88(XG) 		
Wind Energy Generation		■ Forecasted monthly wind energy Generation for a period of 1 year using past ~17 years data with SARIM ■ Checked stationarity of transformed data with ADF test , removed trend by differencing, order by ACF-PA ■ Selected model with the best AIC verified residuals using Living Poy test and achieved an MAPE of 4.74 %		
Forecasting PC Prediction		 Selected model with the best AIC, verified residuals using Ljung-Box test and achieved an MAPE of 4.749 Classified proton conductivity (high/low) of sulfonated polyimide polymer to find a low cost PEM mater. 		
(Classification) BTech Project		■ Featurization using Bag of bonds and QSPR descriptors Iterative feature selection using the Relief meth ■ Implemented C4.5 - a Decision Tree classifier (using 10-fold CV) with accuracy and F1 score of 0.71 & 0. 7		
Financial Fraud Detection (Graph- ML)		 Built GNN based fraud user recognition on Finvolution data of 3.7M+ node (user) class imbalance (78: 17 demographic features of each user used as initial node embedding Implemented GCN and GraphSA Modelled message passing to incorporate the structural information Achieved AUC-ROC of 0.73 & 0.7 		
Customer Segmentation (Clustering)		 Performed customer segmentation on retail transaction dataset (3.5L+ obs.) for a targeted ad campaig Implemented RFM analysis for feature engineering; applied PCA; used K-means, agglomerative and DBSG Identified opt. 4 segments with customer profiling by elbow method; silhouette score-0.83 & DB index -0. 		
ADDITIO	NAL PROJI	ECTS		
Extracting Customer needs using UGC (NLP)		 Built CNN based text classifier to filter informative sentences from UGC data (Amazon Oral-care review Fine tuned the word2vec (skip-gram) word embeddings Achieved F1 score of 0.69 and Precision of 0.7 Implemented Ward's Clustering & RAG based Chatbot for extracting customer needs from filtered content 		
Image Captioning (Deep Learning)		■ Generated textual captions for 6.7k images using pre-trained ResNet as encoder and LSTM based decode ■ Explored & Fine Tuned with Vision Transformers (VIT-base16) as encoder Improved SPICE score (16%)		
Portfolio Optimisation		 Utilized MPT on 5 Indian stocks; taking data from Yahoo Finance & generated the Efficient Frontier Curv Optimized the portfolios to achieve a maximum Sharpe Ratio of 1.07 and a minimum volatility of 08.34 generated 		
POSITIO	NS OF RES	PONSIBILITY & EXTRA CURRICULAR		
Placement Representative		 Conducted Final Placements 2024 attained increase in median CTC by 63%, mean by 51%, max by 207 Created centralized database for the first time in history of PGDBA facilitated sponsorship for Trilytic 73% PPO conversion rate onboarded 63% more recruiters and an international recruiter after 6 year 		
Constitution and ISMP Coordinator		■ Drafted amendments for the Student Co	onstitution of IIT Ropar for enhanced efficacy and actured the SMP to ensure smooth transition of fre	accountabil

■ Part of **bronze medal** winning team in the Dramatics competition in **Inter IIT Cultural Meet 2017**, in **IIT K**

ELECTIVES: Deep Learning, Econometrics, Financial Risk Mgmt INTERESTS: Reading plays, Public Policy