## **PEEHOO JAIN**



	100 jii			CALCUTTA
ACADE	MIC QUALIFI	CATIONS		
Year		Degree /Board	University /Institution	%/CGPA
2025*	Post Gr	raduate Diploma in Business Analytics	IIM Calcutta, IIT Kharagpur, ISI Kolkata	-
2023	B.Tech + N	AS (Computer Science and Management)	School of Engineering, JNU, New Delhi	8.29/9
2018	CLASS XII		St. Joseph's Convent Sr. Sec. School, Sagar, M.P.	93.4 %
2016		CLASS X	St. Joseph's Convent Sr. Sec. School, Sagar, M.P.	10/10
KEY SKI	LLS/TOOLS	Predictive Modeling, Statistical Inferen	ce, Programming, Data Visualization, Python, Excel, S	SQL
AWARD	S AND ACH	IEVEMENTS		
Academic  Case Competitions		<ul> <li>Secured highest rank with FGPA of 8.29/9 in B. Tech (CSE) + MS (Management) batch 2018-2023 at SE, J.</li> <li>Obtained 9/9 (A+) for MS(Management) Dissertation; "The Role of FinTech in Sustainability and UN SDG</li> <li>Received scholarship (₹ 6lakh+) under Mukhyamantri Medhavi Vidyarthi Yojana by the MP Govt (2018-2</li> <li>Recognised as NPTEL Star(Believer) session Jul-Dec '22; secured 97.5%ile in CAT'22 &amp; 98.6%ile in XAT'</li> <li>Achieved All India Rank 40th in the National Financial Literary Assessment Test (NFLAT) by NCFE ( Jan'14</li> <li>2nd Rank/1159 in HRMony, HR-Organizational Structure case in Startups, hosted by IIM-Ahmedabad['2"</li> <li>National Finalist (top 5/627), in E2A-The Analytics Challenge on user dashboard creation, XLRI Delhi['2"</li> </ul>		
Case Co	ompetitions	1 - 1 - 1	Cogentix, for offer acceptance prediction, by IMT-Hy	_
Cert	ifications	■ Financial Accounting, NPTEL online cer	cation by IIT KGP, obtained 83% marks, among top trification by IIT B, obtained 91% marks, among top Capital Management, NPTEL online certifications by	<b>2%</b> candidat
ACADEI	MIC PROJECT	ΓS		
	er Price Index		ly PPI of Advertising Space and Time Sales; utilizing 9	96 months da
Forecasting (Time		■ Checked stationarity using <b>ADF</b> test; analyzed <b>ACF-PACF</b> plots for <b>ARIMA</b> order and <b>Ljung-Box</b> for Residua		
S	Series)	■ Compared ARIMA models for optimal mo	del selection; utilizing ${\it SARIMA}$ with least ${\it AIC}$ of ${\it 5.23}$	& MAPE 2.0
System Implemented RFE, ID3 a		■ Implemented <b>RFE</b> , <b>ID3</b> algorithm and PC	credit worthiness of customers with 100k records of the for feature selection and extraction, performed un GridSearchCV to achieve an accuracy of 0.79 and F1.	nder sampli
Employee Salary Prediction (Regression)		<ul> <li>Predicted employee monthly salary utilizing MLR models on dataset with 32 features; applied OH encoding</li> </ul>		
		■ Checked multicollinearity using VIF & feature significance using t-tests; Outlier detection using Jack-Kni		
		■ Error analysis via <b>QQ plot</b> & <b>KS Test</b> , improved <b>R</b> <sup>2</sup> to <b>0.946</b> using <b>Ridge</b> regression from baseline <b>OLS</b> mode		
Medical Cost Analysis (Clustering)		■ Inspected the <b>medical cost dataset</b> for identification of <b>high-risk groups</b> through cluster creation and <b>ED</b> ■ Employed <b>elbow method</b> to find optimal clusters, <b>KMeans</b> , <b>Agglomerative</b> and <b>DBScan</b> clustering metho ■ <b>Feature engineering</b> using <b>PCA</b> , identified <b>5 customer segments</b> and achieved a <b>silhouette score</b> of 0.362		
Fake Review Detection (NLP)		■ Developed classifiers leveraging ML & BERT-centric models for classifying hotel reviews into truthful & fak ■ Performed data-preprocessing; used CountVectorizer and TF-IDF in Naive Bayes to get accuracy of 86.56 ■ Leveraged ensemble techniques; AdamW optimizer; enhanced accuracy to 91% utilizing Roberta + LSTM		
ADDITI	ONAL PROJE	ECTS		
Tracl	water Object king (Deep arning)	■ Employed <b>UWCNN</b> and <b>SENet</b> as subnetv	<b>DFNet</b> ) and modified its <b>Siamese</b> pipeline for <b>image</b> work of Siamese to learn the <b>appearance similarity</b> a <b>7.7%</b> ; reduced <b>ID Switches</b> by <b>36.4%</b> on <b>Fish4Know</b>	and track fish
Similar Product Recommendation		Identified similar e-commerce products based on images & their description using <b>non-parametric</b> learning. Extracted <b>feature embeddings</b> from images using pre-trained <b>EfficientNet</b> & <b>DensetNet Deep CNN</b> mode. Achieved <b>F1-score</b> of <b>0.84</b> ; identified <b>top-k</b> visually similar products by utilizing <b>KNN</b> and tuning threshold.		
Portfolio Optimization		■ Collated over <b>18 months</b> of daily stock prices of <b>20 NSE-listed</b> firms to find the optimal investment portfol ■ Used <b>Markowitz</b> as a base model; employed <b>Hidden Markov Model</b> (5 states), calculated <b>transition matr</b> ■ HMM outshone Markowitz with <b>returns 1.25 (34%↑)</b> , <b>volatility 0.18 (16%↓) &amp; Sharpe ratio 7.09 (59%</b> %)		
LLM-Based SQL Query Generator (GenAI)		■ Employed Google PaLM, LangChain to convert natural language questions into SQL queries for a retail stor ■ Implemented few-shot learning; using Hugging Face embeddings and ChromaDB for complex SQL querie ■ Created a simple web-based UI using Streamlit, to facilitate interactions with & querying a MySQL database		
POSITIO	ONS OF RES	PONSIBILITY & EXTRA CURRICULAR	S	
Extra-	curriculars		anliness drives, road safety, drug abuse and child safe e <b>2018</b> ( Under <b>MHRD</b> Plantation Master Plan ) in the	
	A Casebook ngoing)	T	PGDBAs DS Case Book, with 10+ analytics related buss KPIs and relevant case studies for the Finance and	

ELECTIVES: Machine Learning, Financial Risk Management

INTERESTS: Culinary Enthusiast