

# ANIMESH PATEL



## ACADEMIC QUALIFICATIONS

Year	Degree /Board	University /Institution	%/CGPA
2025*	Post Graduate Diploma in Business Analytics	IIM Calcutta, IIT Kharagpur, ISI Kolkata	-
2016	M.Sc. Mathematics	IIT Bombay	7.2/10
2014	B.Sc. (Hons) Mathematics	Hindu College (Delhi University)	85.7 %
2011	CLASS XII	Jawahar Navodaya Vidyalaya Orai, Jalaun, Uttar Pradesh	91 %
2009	CLASS X	Jawahar Navodaya Vidyalaya Orai, Jalaun, Uttar Pradesh	91 %

**KEY SKILLS/TOOLS** Statistical Data Analysis, Statistical Inference, Excel, PowerPoint skills, Python, R Programming, SQL

## AWARDS AND ACHIEVEMENTS

### INSTITUTE RANK - 2 (PGDBA 2023-25)

Institute Rank	<ul style="list-style-type: none"> <li>■ Achieved <b>10/10 CGPA</b> in Pre-semester &amp; ISI semester   <b>Got 10/10 in 11</b> out of 17 subjects till 2<sup>nd</sup> semester</li> <li>■ Awarded <b>merit-based scholarship</b> for outstanding academic performance in 1<sup>st</sup> Sem, PGDBA by ISI Kolkata</li> </ul>
IDB IIMC Case	■ Secured <b>4<sup>th</sup>/940</b> teams in IDB Analytics case by IIM Calcutta   Recommended growth & expansion strategies
UPSC Exam	■ <b>Top 1%</b> out of ~10 Lakhs+ of UPSC CSE prelims applicants; qualified for <b>UPSC mains twice</b> in 2020 & 2022
IIT JAM	■ <b>Ranked 119</b> in JAM (Math-MA) 2014–amongst <b>top 2%</b>   <b>Ranked 97</b> in JAM (Statistics-MS) 2014 – in top 7%
AISSCE Exam	■ <b>Got rank-1</b> in Jawahar Navodaya Vidyalaya Orai in All India Senior Secondary Certificate Exam (CBSE - 2011)

## WORK EXPERIENCE (28 Months)

Quess Corp Ltd, Alp consulting ltd	Business Analyst (Client- Abbott)	Mumbai (Jun '16 - Oct '18)
Descriptive Analytics & Visualizations	<ul style="list-style-type: none"> <li>■ Analyzing past <b>trends</b> for <b>Brand plans</b>, <b>KPI tracking</b> and <b>correlation</b> analysis, monthly <b>reports &amp; analysis</b></li> <li>■ Participate in <b>sales reviews &amp; field work</b>, data liaison for senior management   <b>Tools</b> - Excel, PPT, PowerBI</li> <li>■ Created <b>Dashboard</b> for sales team review and Designed <b>pilot dashboard</b> for Abbott Nutrition Division India</li> <li>■ <b>Data quality</b> improvement &amp; <b>automation</b> drives – for ~55000 HCPs and ~1500+ Hospitals &amp; Nursing homes</li> </ul>	
Impact & Recognition	<ul style="list-style-type: none"> <li>■ Recommended <b>cross engagement</b> and <b>dual engagement</b> strategies, Effective allocation of dieticians &amp; TBE</li> <li>■ <b>A/B/C categorization</b> of HCPs based on overall <b>profile</b>; <b>Saved nearly half a day</b> for ~450+ FF every month</li> <li>■ Achieved <b>highest performance rating (EE)</b> for <b>consecutive 2 years</b> in performance appraisal (in <b>top 5%</b>)</li> </ul>	

## ACADEMIC PROJECTS

Length of Stay Prediction (Regression)	<ul style="list-style-type: none"> <li>■ Built <b>Regression model</b> to <b>predict LOS of patient</b> on dataset having <b>100K+ observations &amp; 27 attributes</b></li> <li>■ Addressed <b>Multicollinearity</b> using <b>VIF</b>   Applied <b>OLS &amp; polynomial</b> regression; <b>Lasso</b> for feature selection</li> <li>■ Employed <b>Residual analysis</b> for model <b>validation</b>, <b>outlier</b> detection   Improved <b>R<sup>2</sup> (23%↑)</b> using <b>XGBoost</b></li> </ul>
Crude Oil Import (Time Series)	<ul style="list-style-type: none"> <li>■ <b>Forecasted</b> demand of US crude oil import for next <b>15 months</b> from past <b>150 months</b> data utilizing <b>SARIMA</b></li> <li>■ Used <b>ADF test</b> for <b>stationarity</b>; removed trend by differencing, analyzed <b>ACF-PACF plots</b> to fix <b>ARMA</b> order</li> <li>■ Selected best model based on <b>AIC</b> value, verified <b>residuals</b> using <b>Ljung-Box test</b> &amp; achieved <b>MAPE of 5.22%</b></li> </ul>
Movie Recommender System	<ul style="list-style-type: none"> <li>■ Built a <b>Hybrid</b> recommender system (content based &amp; user-to-user collaborative)   <b>MovieLens100k</b> dataset</li> <li>■ Used <b>Jaccard &amp; Cosine</b> Similarity, <b>K-Modes</b> Algorithm for recommendations   Resolved <b>cold start problem</b></li> <li>■ Quality of clusters with <b>silhouette score (0.581-Hierarchical &amp; to 0.696-K-Modes)</b>   <b>hit rate (2.66 movies)</b></li> </ul>
Portfolio Optimization	<ul style="list-style-type: none"> <li>■ Utilized <b>MPT</b> on 5 Indian stocks   extracted data from Yahoo Finance and generated <b>Efficient Frontier Curve</b></li> <li>■ <b>Optimized</b> the <b>portfolios</b> to achieve a maximum <b>Sharpe Ratio</b> of <b>1.07</b> and a <b>minimum volatility</b> of <b>8.34 %</b></li> </ul>
Email Classification (NLP)	<ul style="list-style-type: none"> <li>■ Built a model to <b>classify</b> spam and not spam emails on Dataset of <b>5.5k+</b> emails using <b>Naïve Bayes</b> and <b>LSTM</b></li> <li>■ Preprocessed text with <b>TF-IDF embeddings</b>, improved <b>Recall</b> value of <b>0.85</b> (LSTM) from <b>0.81</b> (Naive Bayes)</li> </ul>

## ADDITIONAL PROJECTS

Image Captioning (Deep Learning)	<ul style="list-style-type: none"> <li>■ Generated textual <b>captions</b> for <b>6.7k</b> images using <b>pre-trained CNN</b> based encoder and <b>LSTM</b> based decoder</li> <li>■ Obtained <b>Rouge- L - 0.276</b>, <b>SPICE - 0.146</b>, <b>BLEU - 0.112</b> scores for generated summaries on 929 test images</li> </ul>
Credit card default prediction (Classification)	<ul style="list-style-type: none"> <li>■ Built <b>classification model</b> for credit card default prediction on <b>30K+</b> historical credit dataset &amp; <b>24</b> features</li> <li>■ Applied Oversampling (<b>SMOTE</b>) for balancing data; used <b>Logistic Regression</b>, <b>Random Forest</b> &amp; <b>XGBoost</b></li> <li>■ Performed <b>hyperparameter tuning</b> and improved <b>F-beta score</b> from <b>.80(LR)</b> to <b>.84</b> &amp; attained <b>AUC of 0.87</b></li> </ul>

## POSITIONS OF RESPONSIBILITY & EXTRA CURRICULARS

PGDBA Magazine Team	<ul style="list-style-type: none"> <li>■ <b>Authored</b> - "Leveraging AI to Revolutionize Sales in Pharma: An AI Guide for Medical Representatives"</li> <li>■ <b>Edited articles</b>   <b>Prepared</b> questionnaire &amp; <b>organized</b> interviews for academicians &amp; industry leaders in AI</li> </ul>
Head of Public Relations Team	<ul style="list-style-type: none"> <li>■ <b>Led PR team</b> of <b>Math Olympiad</b>, Math assoc., Math dept., IIT Bombay   <b>Managed a team of 30 volunteers</b></li> <li>■ Connected w/ <b>150+ schools &amp; 20+ coachings</b>   <b>1000+ students'</b> participation   Improved <b>revenue by 50%</b></li> </ul>
MSc Representative	■ <b>Represented</b> M.Sc. Math students in Academic & student council meetings   <b>Bridge</b> btw faculty and students
Music & sports	■ <b>Ranked 1 &amp; 3</b> in Dramatics & Music in PG Cultural - IIT Bombay   <b>Winner</b> - Volleyball - Hindu College hostel

**ELECTIVES** : Deep Learning, Financial Risk Mgmt, Econometrics

**INTERESTS** : Music, Volleyball