

SAMAYAMANTHULA MANIKYAM



ACADEMIC QUALIFICATIONS			
Year	Degree /Board	University /Institution	%/CGPA
2025*	Post Graduate Diploma in Business Analytics	IIM Calcutta, IIT Kharagpur, ISI Kolkata	-
2019	B. Tech Electrical Engineering	NIT Durgapur	8.09/10
2015	CLASS XII	Tirumala Junior College, A.P	96.7 %
2013	CLASS X	Sri Prakash Vidya Niketan, A.P	9.5/10
KEY SKILLS/TOOLS		Predictive Modeling, Statistical Inference, Stakeholder Management Python, R, SQL, Tableau, Excel	
WORK EXPERIENCE (48 Months)			
TATASTEEL (Tinplate Division)		Senior Engineer	Jamshedpur (Jul '19 - Jul '23)
Roles and Responsibilities	<ul style="list-style-type: none">Led a team of 40+ for maintenance of Power Distribution centers,implementing PM,PdM and RCM programs.Managed 10+Minor& 3 Major Capex projects through their entire life cycle from bid-to-close totaling 25Cr.Managed resources, coordinated with stakeholders and cross-functional teams effectively during MSDs.Trained 100 plus workers on Safety, Kaizen, 5S, PPE, KYT, JCC & conducted Toolbox meetings to arrest OFIs.		
Impacts and Accomplishments	<ul style="list-style-type: none">Achieved annual savings of ₹1.2 Cr by enhancing power factor through analysis of the entire plant's powerAchieved 30% savings by redesigning lighting with LEDs&5% plant-wide reduction with 1MW Solar panels.Improved reliability in plant operations, through TBM & CBM by 15%, cost saving of over 30 lacs/annum.Developed Tableau dashboards for PdM, RCA and KPI tracking to optimize maintenance and operations.		
Rewards and Recognitions	<ul style="list-style-type: none">Secured 3rd in Tata's Innovista'21 among 100+ participants&1st in Tata's Innovista'23 for safety among 50+.Awarded Best Focused Improvement Project '2022 for Cost saving through improvement in power factor.Rated Excellent and among the top 5% Employees for 2 consecutive years in Annual Performance Ratings.		
AWARDS AND ACHIEVEMENTS			
Scholastic Achievements	<ul style="list-style-type: none">Achieved AIR 378 in JEE Mains '2015 Paper-II and secured Top 1.40 percentile in JEE Mains '2015 Paper-I.Received Certificate of Merit and Cash Award for Superior Performance in 12th from Visakhapatnam CBL.State Rank 17 in C.V.Raman Young Genius Awards SLTSE'12 ; Represented District in State level NCSC'11.		
Case Competitions	<ul style="list-style-type: none">Selected as finalists in the 6 Degrees Analytics event, organized by Indian Institute of Management Trichy.		
ACADEMIC PROJECTS			
Uber Ride Price Prediction (Regression)	<ul style="list-style-type: none">Developed a Regression model to predict Uber ride prices on ~2L observations using OLS as baseline modelTreated Outliers , detected multicollinearity with VIF ; Performed PCA and identified features using ANOVALeveraged GridSearchCV to tune hyperparameters for Ridge and Lasso Regression, achieved an R² of 0.72.		
Vehicle Sales Prediction (Time Series)	<ul style="list-style-type: none">Forecasted Vehicle sales for next 12 months using past 30 yr data ; removed trend by 1st order differencing.Checked stationarity using ADF test ; analysed ACF-PACF plots for AR-MA order and tuned SARIMA model.Applied Ljung-Box for Residuals, Selected best model based on AIC and BIC scores ; Achieved MAPE of 8% .		
Credit Card Fraud Detection (Classification)	<ul style="list-style-type: none">Developed a classification model to identify Credit Card fraud transactions on data of 280k+ transactions.Utilized UnderSampling for Class imbalance; Conducted EDA & extracted graph-based features (Node2Vec)Developed Log-Reg, Random Forest, and XGBoost models, attaining a macro F1 Score of 0.82 with XGBoost		
Image Classification (CNN)	<ul style="list-style-type: none">Developed CNN model to detect Malaria using 27K+ blood smear images from National Library of MedicineExercised data augmentation, dropout & batch-norm; obtained an accuracy of 93% with Customized CNNLeveraged transfer learning &fine-tuned VGG-19 architecture to improve accuracy to 96%&recall (0.96)		
Supply chain Optimization	<ul style="list-style-type: none">Optimised supply chain on the distribution side and simulated alternate strategies for a beverage companyForecasted demand using SARIMA & Holt-Winters and evaluated the current demand fulfillment using LPPSuggested D2C, warehouse addition, Outsourcing; lead to 6.8%↑ in profits and 100% demand satisfaction		
ADDITIONAL PROJECTS			
Stack Overflow Question Status (NLP)	<ul style="list-style-type: none">Predicted question status (Open,Non real etc..) of stack overflow by extracting information from 40K+ textPerformed text preprocessing using NLTK,used Word2vec embeddings and trained RF, MLP&LSTM modelsLeveraged the BERT tokenizer and fine-tuned a pre-trained BERT model and achieved an F1 score of 0.68.		
Customer Segmentation (Clustering)	<ul style="list-style-type: none">Performed Customer Segmentation for targeted marketing campaign using ~3.5L retail transactions data.Conducted feature engineering using RFM analysis,employed PCA;used k-means,agglomerative & DB ScanIdentified opt.4 segments with customer profiling by elbow method;silhouette score-0.83&DB index-0.41		
POSITIONS OF RESPONSIBILITY & EXTRA CURRICULARS			
Position of Responsibilities	<ul style="list-style-type: none">Convener of DIC-Plant Services of Apex Safety Committee in Tata Steel,ensuring thorough safety complianceOrganizing team member for 15 events at CCA, NIT Durgapur, engaging over 300 participants for Earth day		
Analytics Club	<ul style="list-style-type: none">As a member of Analytics Club - IIM Calcutta (2023-25) , published 25th edition of Dataverse on topic RAG .		
ELECTIVES : Deep Learning, FRM, Pricing, Supply Chain Analytics		INTERESTS : Table Tennis , Movies	