VARUN BHAGWANI



ACADEMIC QUALIFICATIONS				
Year	Degree /Board	University /Institution	%/CGP/	
2025*	Post Graduate Diploma in Business Analytics	IIM Calcutta, IIT Kharagpur, ISI Kolkata	-	
2020 B.E. (I	Hons.) + M.Sc. (Hons.) Electronics & Instrumentation	BITS Pilani	7.24/10	
2015	CLASS XII	Amity International School, Mayur Vihar	93.2 %	
2013	CLASS X	Amity International School, Mayur Vihar	9.2/10	
KEY SKILLS/TOOL	S Statistical Data Analysis, Probability, Problem	Solving, DSA, Agile, Python, SQL, C++, TypeSc		
VORK EXPERIE			•	
IO Platforms LTD.		Engineer Bengaluru (Au	g '20 - Jul '2	
Roles &	■ Worked on E2E delivery : Requirement gatheri	ng, test driven development, deployment and o	documentati	
Responsibilities Jio Subscription Engine	■ Developed REST APIs scripts and asynchronol	us jobs via NodeJS , adding major functionality e, enabling it's free onboarding and premium su	to application s	
Jio ChargeIt	 Aided requirement refinement using customer perspective; Implemented scalable schema w/ PostgreSQ Created API suite for plan, addon and order management enabling smooth purchase of customized plan Jobs to create and send invoice on transactions; Leveraged Kubernetes and Azure Devops for deployment Assisted quick launch led to onboarding major streaming service as 1st client, few businesses aligned next 			
Recognition	■ Received spot award from the team in 2022; re	ceived maximum A* rating for 2 consecutive y	years in revie	
Leadership	■ Mentored 3 interns who joined Subscription E	ngine; Supervised a junior in ChargeIt produc	ct developme	
NTERNSHIPS (, , , , , , , , , , , , , , , , , , ,		
Happay (VA Tech V		n Bengaluru (Jul	'19 - Dec '1	
Vehicle Managemo (Fastag) Produc	 Created backend APIs, scripts and documentation Developed features for vehicle data retrieval, to 	on with Python and Django ; Resolved 10+ dev ransaction syncing and user-vehicle mapping	elopment bu key to prodı	
AWARDS AND A	ACHIEVEMENTS			
Data Science Competitions		■ National Finalist (Top 4/980) in Scytale 4.0, a social data analytics competition conducted by IIM Ranchi 2 ■ National Finalist (Top 5/424) in µ-lytics, an attrition analytics competition hosted by Master's Union 12		
Certifications	■ Completed Deep Learning Specialization -And	lrew NG; Continuous Delivery w/ Azure Dev	ops- Linked	
ACADEMIC PRO	JECTS			
Credit Default Prediction (Classification)	 Predicted the probability of customer loan default for 15 lakh+ applications with 400+ attributes in 32 file. Performed data aggregation, SMOTE for class imbalance, feature engg; Trained LGBM and CatBoost mode. Created a weighted ensemble model using soft voting classifier; Achieved AUC score of 0.88 and recall 0.7. 			
Employee Salary Prediction (Regression)	■ Predicted Employee Monthly salary for a firm, utilizing MLR models on a dataset with more than 30 feature Checked multicollinearity with VIF, feature importance using t-tests, error analysis via QQ plot & KS Test Employed Lasso and Ridge; Improved adjusted R² value to 0.944 with backward feature selection models.			
Named Entity Recognition (NLI	■ Given 6.8k essays , built a classification model for detecting PII, automating manual masking of personal da ■ Generated POS tags using SpaCy ; Tokenized via Bert Tokenizer ; RegEx to identify phone nos., emails & ur ■ Employed stacked & ensemble DeBERTa models to classify tokens; Improved F-5 score from 0.695 to 0.95			
NG Consumption (Time Series)	■ Forecasted Natural Gas Consumption using past 23 years of monthly data in US that had 250+ observation Implemented SARIMA , Ljung-Box for residuals; Grid search via AIC & BIC for best model; MAPE ↓ to 8.87 to 9.87 to 9.			
ADDITIONAL PI	ROJECTS			
Health Insuranc	e ■ Analyzed medical cost data to identify high-ris	k groups; Employed Elbow method to find o	ptimal cluste	
Segmentation	■ Applied KMeans , Agglomerative and DBScan ;	$\blacksquare \ \text{Applied KMeans, Agglomerative} \ \text{and DBScan} \ ; \ \text{Identified 5 segments} \ \& \ \text{achieved a silhouette score of 0.36} \ \text{and DBScan} \ ; \ \text{Identified 5 segments} \ \& \ \text{achieved a silhouette score of 0.36} \ \text{and DBScan} \ and$		
Masked Image Completion (Gen	 ■ Developed a model for image completion on 7000+ images; Applied image augmentation to ↑ count to 35 ■ Applied preprocessing using rescaling & standardization; Used CGAN & Pix2Pix to ↓ RMSE to 0.76 via CGA 			
Stock Market Ind	ex ■ Used daily Nifty50 data(2009-21) to predict pr	■ Used daily Nifty50 data(2009-21) to predict prices in 2021-24; Computed 10 market indicators as feature ■ Employed LSTMs; Achieved decrease in RMSE by 224 points (Range 14k-22k) with BI-LSTM and indicators		
		of == 1 points (range 1 in 22h) with bi-131M	and mulcate	
		I Castian Way to all want in Co. 101	him or timer	
	■ Captained PGDBA football team to silver in IIM Section War; took part in General Championship at IIT KG			
	-	■ Devised case solutions and KPIs for Banking & Automobile industry in 2 nd version of PGDBA DS Caseboo ■ 1st runner up in IIM Cal Board Game Competition; Ranked ~ Top 1 %ile of all FPL players(5.9mn+) in 201		
	■ Used daily Nifty50 data(2009-21) to predict pr ■ Employed LSTMs; Achieved decrease in RMSE I JLARS ■ Captained PGDBA football team to silver in IIM ■ Devised case solutions and KPIs for Banking 8	ices in 2021-24 ; Computed 10 market indicat by 224 points (Range 14k-22k) with BI-LSTM and the section War; took part in General Champions Automobile industry in 2 nd version of PGDBA	ors as and ir thip at A DS (

ELECTIVES: Comp Finance, FRM, ML, Econometrics, PRO

INTERESTS: Football, Formula 1, Finance