



EDUCATION					
	Degree/Certificate	Institute	CGPA / %	Year	
M. Tech (Department of Management Sciences)		Indian Institute of Technology, Kanpur	_	2025 - Present	
B. Tech (Electronics & Comm. Engineering)		Birla Vishvakarma Mahavidyakaya, Anand	7.51	2019-2023	
Higher Secondary Education (CBSE Board)		K.V. No.1 Shahibaug, Ahmedabad	64.6	2019	
Secondary Education (CBSE Board)		K.V. No.1 Shahibaug, Ahmedabad	8.0	2017	
PROJECTS					
Multivariate a	and Polynomial Reg. for Car Price Pred.	9 1 9		<u> </u>	
Objective	Build Car price Prediction Models using Linear/Polynomial Regression with Lasso and Ridge regularization for accuracy and reduced overfitting.				
Approach	<ol> <li>Data Preparation – Loaded car dataset, cleaned duplicates/missing values, encoded categoricals, normalized numericals applied PCA.</li> <li>Feature Engineering – Analyzed covariance, selected top features, generated polynomial features for non-linear patterns</li> <li>Modeling &amp; Evaluation – Trained regression models with Lasso/Ridge, compared via R<sup>2</sup> &amp; RMSE, visualized actual vs predicted values.</li> </ol>				
Result	Best Performance was achieved with Ridge (L2) regularisation, under Linear regression, R <sup>2</sup> : 0.8365   RMSE: 0.4508 & For Polynomial Regression (Degree = 2) also, Ridge (L2) regularisation was best with R <sup>2</sup> : 0.9312   RMSE: 0.2925				
Ensemble Lea	rning for MBA Admission Pred.*   Machi	ne Learning   Classification ( <u>GitHub Link</u> ,	(Self Proje	e <b>ct)*</b> Aug 2025	
Objective	To <b>Predict MBA admission status</b> using PCA-reduced features and compare Decision Tree, KNN and SVM models (with ensemble optimizations) based on accuracy and F1-score. overfitting.				
Approach	<ol> <li>Data Preprocessing – Handled missing values and scaled features.</li> <li>Dimensionality Reduction – Applied PCA to preserve variance with fewer features.</li> <li>Modeling &amp; Optimization – Trained Decision Tree, KNN, SVM; enhanced with Random Forest, Bagging, and Boosting.</li> <li>Evaluation – Compared models using Accuracy and F1 Score as [Decision Tree, KNN, SVM]</li> </ol>				
Result	The performance of all trained models will be evaluated using <b>Accuracy</b> [0.87, 0.88, 0.86] & <b>F1 Score</b> [0.82, 0.83, 0.82]				
Simple Chatbo	ot using NLP   Machine Learning   Classif	cation + Retrieval-based Matching (GitH	ub Link)  (Se	If Project) July 2025	
Objective		a hybrid approach of Logistic Regression and g, and integrated utilities with threshold-base			
	istilBERT for Emotion Classification   Machi arning model) ( <u>GitHub Link</u> )   (Self Project)	ne & Deep Learning   Used pre-trained Dis	stilBERT (a Tra	ansformer June 2025	
Objective & Result		RT model for multi-class emotion classification confidence, indicating high text classification		uggingFace emotion	
ML pipeline-C	case St. on Titanic Disaster Survivors   Mad	chine Learning   Regression (GitHub Link	(Self Proje	ect) June 2025	
Objective & Result		on the Titanic dataset—cleaned data, traine oblib—achieving 79.89% accuracy as evaluated.			

# **Work Experience**

### Project Intern, National Remote Sensing Centre [NRSC], ISRO (Full-Time Internship) | Jan. 2023 - June 2023

- -Developed a 4-wheeled interactive robot at ISRO-NRSC with autonomous navigation, QR-based exhibit recognition, and speech interaction to enhance museum visitor experience.
- -Integrated a voice-enabled chatbot using OpenAI and Wikipedia APIs, plus speech recognition and line-following for guided tours.
- -Designed the 3D structure in Blender, optimized sensor placement, and deployed the robot live, engaging 500+ visitors monthly.

## Professional Certificate Program in AI & ML (Online Mode), IIT PATNA (In partnership with PW-Skills) | Feb. 2025 - July 2025

Gained AI/ML fundamentals with Python, R, and key libraries, applied in projects like chatbots and predictive modeling, using tools like R Studio, PyCharm, and Google Colab.

COURSEWORK & SKILLS *in progress			
Relevant	Data Mining and Knowledge Discovery*   Probability & Statistics*   Operations Research for Management*		
Courses	Introduction to Computing*		
Skills	Python  ML Libraries: NumPy, Pandas, Matplotlib, Scikit-learn, NLTK, etc.   R  MySQL*  Prompt Engineering   Excel		
	Power Bi*		
Soft Skills	Analytical Ability   Decision Making   Problem Solving   Communication Skills   Leadership		
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### **ACHIEVEMENTS & EXTRACURRICULAR**

- Participation Certificate at Algo Messiahs 2019, in Technical Fest Genesis'19 held at BVM, Anand, Gujarat
- Certificate for completion of Student Excellence & Learning Program (SELP) 2019, held under BVM, Anand Gujarat
- Certificate of Participation in Smart Gujarat for new India Hackathon 2020, held at Charusat University, Gujarat