

EDUCATION

Degree/Certificate	Institute	CGPA / %	Year
M. Tech (Department of Management Sciences)	Indian Institute of Technology, Kanpur	*Ongoing	2026 - Present
B. Tech (Mechanical Engineering)	Government Engineering College, Thrissur	8.1	2021 - 2025
Higher Secondary Education (Kerala Board)	St Thomas Thope Higher Secondary School	97.1%	2021
Secondary Education (CBSE Board)	Sreeramakrishna Vidyanikethan Public School, Thrissur	95.4%	2019

SELF PROJECTS

Customer Segmentation (Unsupervised ML) GitHub	
Objective	To segment mall customers into distinct groups based on demographic and behavioural attributes using unsupervised machine learning, enabling more targeted and cost-effective marketing strategies.
Approach	- Applied K-Means clustering to the Mall Customers dataset (200 customers; features: gender, age, annual income, and spending score). - Performed data preprocessing including feature scaling and encoding of categorical variables. - Determined the optimal number of clusters using the Elbow Method and validated clustering quality with the Silhouette Score. - Visualised the resulting clusters to interpret and profile each customer segment.
Result	Identified distinct customer segments (e.g., high-income/high-spending and low-income/low-spending groups), validated via the Silhouette Score — providing actionable insights for targeted marketing.
Wine Quality Prediction GitHub	
Objective	To predict wine quality based on physicochemical properties using machine learning algorithms.
Approach	- Trained multiple ML models including Decision Tree, KNN, SVM, Logistic Regression, and Random Forest. - Evaluated models using metrics such as accuracy, precision, recall, and F1-score. - Conducted feature importance analysis to understand key attributes influencing wine quality.
Result	Achieved 87.9% accuracy using the Random Forest classifier — highest among all tested models.
Bank Customer Churn Prediction Supervised Learning Classification GitHub	
Objective	Developed and executed a ML project focused on bank customer churn prediction using classification techniques.
Approach	- Leveraged Python and popular libraries such as Scikit-learn, Pandas, Matplotlib, and Seaborn to preprocess and analyze the dataset. - Engineered relevant features and employed various algorithms, including Random Forest and Decision Tree Classifier, to build predictive models. - Conducted thorough hyperparameter tuning and cross-validation to enhance model accuracy.
Result	Achieved accuracy [0.868] precision [0.82] using Random Forest Classifier with Hyperparameter tuning.

WORK EXPERIENCE

Project Intern, Vikram Sarabhai Space Centre (VSSC), ISRO, Thiruvananthapuram | Oct – Nov 2024 (45 Days)

- Worked on "Design of Skirt Mandrel for Motor Cases" in the Composites Pressurized Systems Processing Division (CPPD), CPSC.

COURSEWORK & SKILLS *in progress	
Relevant Courses	Probability & Statistics* Operations Research for Management* Introduction to Computing* Data Mining and Knowledge discovery*
Skills	Python ML Libraries: NumPy, Pandas, Matplotlib, Seaborn, Scikit-learn
Soft Skills	Analytical Ability Decision Making Problem Solving Communication Skills Leadership Team Management

POSITIONS OF RESPONSIBILITY

Class Representative | B.Tech | Mechanical Engineering Department | GEC Thrissur | 2024-25

- Represents the batch in official/unofficial matters. Coordinate with Department head and Department office for all academic work if needed.

Kabaddi Team Captain | GEC Thrissur | 2024

ACHIEVEMENTS & EXTRACURRICULAR

- GATE 2026:** Secured AIR 58 in Production & Industrial Engineering (PI) and AIR 2372 in Mechanical Engineering (ME), conducted by IIT Guwahati.
- NSS Volunteer | APJ Abdul Kalam Technological University (2023–2025):** Completed 2 years of dedicated community service, regular social welfare initiatives, and special residential camping programs.
- Represented KTU at the Inter-University Kabaddi Tournament hosted by Bangalore City University (Dec 2022).
- Attained 1st position in the Interzone Tug of War competition at KTU (2024).
- Achieved runner-up position in the Roadies event at Dyuthi 2022, GEC Thrissur.