

SANGAM JADHAV

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First Year Postgraduate
Department of Management Sciences

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EDUCATIONAL QUALIFICATIONS			
Degree	Institute / Board	CGPA / Percentage	Year
M.Tech (Industrial and Management Engineering)	Indian Institute of Technology, Kanpur	-	2023-*
B.E. (Civil Engineering)	M. H. Saboo Siddik College of Engineering, Mumbai	7.04/10	2016-2020
Higher Secondary Certificate Examination	Ramnivas Ruia Junior College, Mumbai	72.77%	2016
Secondary School Certificate Examination	K.M.S. Dr. Shirodkar High School, Mumbai	91.40%	2014

ACHIEVEMENTS
<ul style="list-style-type: none">Secured 93.71 percentile (AIR 142) in the GATE-23 Geomatics Engineering paper conducted by IIT Kanpur.Secured 87.45 percentile in the GATE-22 Civil Engineering paper conducted by IIT Kharagpur.Secured 1st Rank in SSC Examination at school level.Got Certificate of Excellence in SSC Examination Conducted by Maharashtra State of Secondary and Higher Secondary Education, Pune.Certificate of participation in Science Exhibition conducted by Inspector of Education, Greater Mumbai.Scored 98 out of 100 marks in Mathematics Exam conducted by Maharashtra Dyanpith.Secured 17TH Rank in the Pre-Secondary School Scholarship Examination conducted by Maharashtra State Board of Examinations.

PROFESSIONAL EXPERIENCE	
CRESCENT ACADEMY	Lecturer <i>March '22-June '22</i>
<i>Objective</i>	<ul style="list-style-type: none">To teach 'Surveying 1' and 'Surveying 2' subjects to batch of 21 students.
<i>Strategy</i>	<ul style="list-style-type: none">Taught each subject from the basic principles of Surveying to advanced level.Utilized a combination of theoretical concepts and practical field concepts to provide a clear understanding of subjects.Emphasized more on the numerical questions and especially previous year's questions.
<i>Impact</i>	<ul style="list-style-type: none">Achieved 100% result in the semester examination with excellent marks.
CRESCENT ACADEMY	Lecturer Trainee <i>Jan '21-june21</i>
<i>Objective</i>	<ul style="list-style-type: none">To teach as well as solve the problem and doubts of 50+ students who appeared in GATE (CE) in the year 2021 and 2022.
<i>Strategy</i>	<ul style="list-style-type: none">Solved doubts related to the 'Geomatics Engineering' section and revised whole concept for better understandingTaught important concepts of the 'Geomatics Engineering' section and conducted quizzes, exams.Stayed 24*7 available through online platforms for doubt solving.
<i>Impact</i>	<ul style="list-style-type: none">All students under my mentorship cleared the GATE examination with good scores.

KEY PROJECTS	
House Price Prediction for Mumbai Metropolitan Region Self Project GitHub	
<i>Objective</i>	<ul style="list-style-type: none">To predict the house prices in MMR using linear regression, decision tree regression.
<i>Approach</i>	<ul style="list-style-type: none">Performed Variable Identification, Univariate analysis, Bivariate analysis over 19 features.Libraries used: NumPy, Pandas, Matplotlib, Seaborn, Scikit-Learn.Trained Linear regression, Decision tree, Random Forest regression models and evaluated their performance using R² score, Mean Absolute Error, Root Mean Square Error.
<i>Result</i>	<ul style="list-style-type: none">Successfully predicted house prices using linear regression and got R² = 0.9681.
IPL Win Prediction Self Project GitHub	
<i>Objective</i>	<ul style="list-style-type: none">To develop a predictive model using logistic regression to forecast the winner of IPL cricket matches.
<i>Approach</i>	<ul style="list-style-type: none">Load and preprocessed each cricket match data and delivery data, combined match information with innings scoreLibraries used: NumPy, Pandas, Scikit-Learn, Matplotlib.Trained Logistic Regression model and predicted the outcomes of matches based on trained model.
<i>Result</i>	<ul style="list-style-type: none">Successfully developed a predictive model using logistic regression and learnt about ML libraries.
Improving Pixel Based Accuracy for LULC Classification Self Project GitHub	
<i>Objective</i>	<ul style="list-style-type: none">To compare different pixel-based models and identify pixel-based model with higher accuracy which can be used for applying 'Shannon Entropy' and 'Urban Expansion Intensity Index' models for LULC classification of Mumbai city.
<i>Approach</i>	<ul style="list-style-type: none">Collected and filtered Sentinel-2 MSI imagery and SRTM DEM data from 01-01-2022 to 31-12-2022.Calculated various spectral indices such as NDVI, NDBI, NDWI, NDMI, NBR from collected datasets.Created 5 land cover classes for Supervised Classification which are Vegetation, Forest, Built-up, Barren, Water.Trained a Random Forest Classifier using training samples and created 4 different classification models viz P1, P2, P3, P4.Computed Confusion matrix and accuracy metrics to evaluate performance of each classification model.
<i>Result</i>	<ul style="list-style-type: none">The P4 model was selected for the LULC Classification, having a kappa coefficient of 0.955.The Overall Accuracy of the pixel-based model was increased from 83.46% to 96.49%. (13.03% increase in accuracy)

Application of GIS in Restaurant Site Selection Self Project		GitHub
<i>Objective</i>	<ul style="list-style-type: none"> To select the most profitable location in the city of Mumbai to open new Sea-view restaurant 'R'. 	
<i>Approach</i>	<ul style="list-style-type: none"> Filtered 3 (Bandra, Charni road, Dadar) probable sites for selecting most profitable location of Sea-view restaurant 'R'. Created GIS Data Model with layers representing Mumbai's boundaries, transportation network, tourist attractions, etc. Entered data using ArcGIS, involving various points, lines, polygon layers for different features such as roads, restaurant, hotels, tourist places, etc. Created Geodatabase for organizing, storing and manipulating Geospatial data. Using tools such as 'Make query layer', 'Buffer', 'Overlay' to assess the tourist density, select the most profitable site. 	
<i>Result</i>	<ul style="list-style-type: none"> Charni road is selected as the most profitable location to open the new Sea-view restaurant 'R'. 	

RELEVANT COURSES, SKILLS AND CERTIFICATIONS	
<i>Academic Courses</i>	Introduction to Computing* Probability & Statistics* Statistical Modelling for Business Analytics* Operations Research for Management*
<i>Technical Skills</i>	<ul style="list-style-type: none"> Programming languages: Python* SQL Java* Software utilities: MS Excel ArcGIS QGIS SNAP Machine Learning Libraries: NumPy Pandas Matplotlib Seaborn Scikit-Learn Deep Learning Libraries (Beginner): Keras TensorFlow OpenCV Pytorch
<i>Online Certifications</i>	Python for Data Science Python for Data Analysis Complete SQL and Relational Database Management System (RDBMS) Data Science and Machine Learning Basic to Advanced Master Microsoft Power BI Excel Beginner to Pro Remote Sensing using ArcGIS Pro
<i>Non-Technical Skills</i>	Analytical Thinking Problem Solving Strategic Thinking Decision Making Adaptability Team Management Communication Skills Leadership Team Work Initiative Taking Skill

POSITION OF RESPONSIBILITY	
General Secretary, M. H. Saboo Siddik College of Engineering	<i>June '19-Sept '20</i>
<ul style="list-style-type: none"> Led a team of 12 members which were responsible for a smooth working of college. Created new policies and budget under the guidance of committee head. Co-ordinated with all departmental head to conduct various events and seminars. 	
Cultural Head, AMBROSIA (Techno-cultural Fest) M. H. Saboo Siddik College of Engineering	<i>Sept '18-May '19</i>
<ul style="list-style-type: none"> Responsible for creating timeline of cultural events in the AMBROSIA fest. Co-ordinated with cultural teams of other colleges and called them to participate in AMBROSIA fest. Collected funds for various cultural events from different organizations. 	
Vice-captain of Ruia College Junior Cricket Team	<i>Sept '14-May '15</i>
<ul style="list-style-type: none"> Led a squad of 15 players in the inter-college cricket tournament conducted by Mumbai Cricket Association. Responsible to select best team as per the format. Maintained records of each player during/after the season. 	
Vice-president of Student Committee, K.M.S. Dr. Shirodkar High School	<i>June '12-Apr '13</i>
<ul style="list-style-type: none"> Responsible for smooth working of school having 1700 students and taking account of problems faced by any student, conveying same to the committee head. Implemented policies created for the students by Principal and other head of departments. Led a team of 16 members to create the timeline of all events which are going to take place in an academic year. 	

EXTRACURRICULARS
<ul style="list-style-type: none"> Delivered a seminar on 'Importance of Geoinformatics' at M. H. Saboo Siddik College of Engineering on 11th August 2022. Member of the Civil Engineering Society (CES) at M. H. Saboo Siddik College of Engineering. Member of the Ruia Nature Club at Ramnivas Ruia Junior College. Completed Bharat Scouts and Guides course with A grade. Gold Medalist of Senior Group Sports Cup in the year 2013-2014. Passed Elementary Grade Drawing Examination held by Government of Maharashtra. Gold Medalist of Dr. Shirodkar Sports Cup in the year 2011-2012.

*Ongoing