# NISHA PRAMANIK

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### **Executive Summary**

Proficient GIS analyst, handling, managing and creating database based on the requirement of the project and solving the errors in existing database. Developing a strategic system for project from conceptualization to implementation. Strong analysing and problem solving skills, multitasking abilities with proven experience of guiding people for their desired work.

- 2 years of experience in creating, handling and managing data in GIS environment.
- Experience of working in the field for ground-truthing in forest areas and while collecting soil samples for the project.
- Teaching GIS and Remote sensing concepts to the college students, Training in open source GIS to officials of Forest Department of Rajasthan.
- Excellent team player and an individual for a particular project.
- Competent in numerous software applications; strong analytical and organizational skills; quick learner and adaptive in learning new technologies.

	Education	
Examination	University	Year
Masters of Technology, Geomatics ,	CEPT University Ahmedabad.	July 2014- May 2016 GPA: 3.10/4.
B.E, Civil Engineering,	Shantilal Shah Engineering College Bhavnagar (Gujarat Technological University)	Aug 2009 – June 2013 CGPA: 6.38/10
	Experience	
August 2017 – Present	Researcher in Department of Forest, Government of Rajasthan	
Oct 2016 – July 2017	Junior Research Fellow in Birla Institute of Scientific Research	
Jan 2016 - May 2016	Teaching Assistant (Spatial Analysis Technique (Advance GIS)) in CEPT University.	
Jul 2015 - Dec 2015	Academic Associate (GIS for planners) in CEPT University.	

### Notable Projects

# Department of Forest, Government of Rajasthan- Researcher (Aug 2017 – Present)

### **Creation of GIS database for Tiger Reserve**

During this period, base layers for Tiger Reserve such as Range boundary, Beat boundary and the thematic layers based on Satellite imagery were created. Based on the requirements of the department, maps were generated (ESZ map, tiger occupancy area, Hill-shade map etc.). Currently working on GIS part of M-Stripes Mobile based Android Application. Have given training to the officials of Forest Dept. on open source-GIS (QGIS) (Basic & Advance). Handling and managing the GIS data and camera trap photographs. Training the officials on GPS use and the Applications used in field.

### **↓** Junior Research Fellow in Birla Institute of Scientific Research (Oct 2016 – July 2017)

"Waste land Analysis of Gujarat " & "Land Degradation Analysis of Gujarat" project sponsored NRSC, ISRO, Government of India

Interpreting the land using LISS-III satellite image based on different wasteland. For ex. scrubland, eroded lands, mining wastelands etc. on BHUVAN Portal. To understand more about the land, ground-truthing was done & soil data samples around north Gujarat were collected for the project. This project was for NRSC and will be uploaded in Bhuvan portal for the year 2015-2016.

# Mtech Projects In CEPT University(2014-2016)

### Summer School at Wuhan University, China.

Greece Crisis: A case study using night light Remote Sensing. In this case study, we tried to understand the correlation between GDP and night time light data. Whether the decrease in GDP of the country caused any disruption in night time light data.

### Mtech Thesis: Spectral Flux on Image Processing

Image processing technique using code based on the characteristics of sound i.e Spectral Flux for Satellite Image Processing was performed. In my thesis, I tried finding if different characteristic of sound can be helpful to enhance image processing. Spectral flux is a defined as the magnitude of frequency bin, restricted to the positive values and summed across from an audio data. A code was developed which displayed how there is a sudden change of features which helps to understand the linear feature more distinctly, across different image dataset.

### ♣ Municipal GIS-Solid Waste Management

A municipality project was taken, in which data was collected from the municipality office about the solid waste collection and a new optimum route was found for door to door collection of solid waste for all the wards and a new landfill site was selected based on the government policy and existing landfill site. Spatial Analyst tool was used to find the optimum route and based on multi criteria overlay method, a new landfill site was found.

#### Winter School

GIS Based model for "Finding a suitable site for container bins". This model was created based on the current location of container bins, population and road cross-section.

# B.E Projects(Civil Engineering)(2009-2013)

#### Bachelor's Final Year Project

My final year project was based on the need of transport facility available to disabled people. Based on different disability how the people suffer in their day to day life and a case study was involved where a comparison was done on facilities provided by USA. Australia and India.

### Earthquake Engineering

In this project, field visit was done in Nuclear Power Plant, Kakrapar unit 3 & 4, which was under construction. While visiting the field, the reactor building was studied and in reference to the subject context, a study was taken on "Construction of Rock Anchors". How Rock Anchors help holding the building and preventing any higher damage during earthquake.

### **Publications**

Sumit M., Nisha P., "Integration of transportation system for a sustainable growth of Urban Transportation system in Indian cities", Journal of Civil engineering and environment Technology(2015)[ISSN 2349-8404], pg: 134-138

### Awards

July 2016 First Place (received RMB 1000 prize money) for the International summer school project at Wuhan University, China

### Technical Skills

ArcGIS, QGIS, ERDAS Imagine, ENVI, AutoCAD, SAGA, PostgreSQL, ArcGIS Online, Geo-Server, MATLAB, Python, C++, HTML, MySQL

## Training Courses

May - June, 21-Days National Summer School on Geospatial Technologies Sponsored by DST-NRDMS in BISR, 2017 Jaipur

## Extra-Curricular Activities

- Training IFS & ACF of Rajasthan Forest Department on GIS & Advance GIS on Open Source Software.
- Attended online lectures on "Geospatial Technologies for Urban Planning" & "Basics of Remote Sensing, GIS & GNSS" course initiated by IIRS, Dehradun.
- Managed and Attended TOT LULC –Ahmedabad organized by Indian society of Geomatics (ISG), hosted by CEPT University, Ahmedabad.
- Organised GIS Day 2015 sponsored by ISG Ahmedabad.