

MAHESH KUMAR TRIPATHItripathi.mahesh1@gmail.com

Contact – 8935063698

GIS AND REMOTE SENSING (GEOSCIENCES)

F NAME-PARAS NATH TRIPATHI

DOB-15/11/1981

P. ADDRESS-HANSRAJPUR HOLAGARH ALLAHABAD U.P. INDIA-212503

L. ADDRESS- DEPT. OF APPLIED GEOLOGY, NITR, RAIPUR

**SPECIALIZATION-**

1. Leica Photogrammetric Suite (LPS) Eradas. (Orthorectification, Contour, Slope, Aspect, DEM/DTM generation through, contour map, stereo pair image in Eradas & Geomatica).
2. Spatial Analyst Tool Arc GIS. (Numerical modeling as Index Overlay Method, Information Value Method, Fuzzy logic Method).
3. Visual Image Interpretation and Classification (Eradas/Arc GIS).
4. Preparation of Lithological, Structural, Geomorphological, and Drainage LULC maps under RS and GIS Platform.

PROJECT WORK.

- 1- Mineral prospecting map and spectral library generation through hyper spectral and multispectral image
- 2-Landslide hazard zonation mapping under statistical and RS &GIS Environment. (IIRS, DEHRADUN)
- 3-Digital terrain modeling (DTM) under RS and GIS Environment (IIRS, DEHRADUN, DRDO).
- 4-National land record modernization project under RS & GIS Environment. (NLRMP PROJECT NRSC, HRSAC)
- 5-Ground water targeting (Geophysical) under RS & GIS Environment
- 6-Rainwater harvesting.
- 7-Ground water quality analysis and mapping under RS & GIS Environment. (RSAC, LUCKNOW)
- 8-Geo-sciences/Earth-sciences map classification (Geofacets, INNODATA, NOIDA).
- 9- Ground water prospecting under RS &GIS Environment. (IIRS, DEHRADUN)
- 10- Land use /land cover change detection under RS & GIS environment.
- 11- Glacial mapping.

SKILLS

MAPPING IN RS AND GIS ENVIRONMENT	DIGITAL IMAGE PROCESSING	LPS, GIS AND GPS UTILITY	MINERAL MAPPING
POREPAIRATION OF THEMATIC MAPS (GEOLOGICAL, GEOPHYSICAL, GEOGRAPHICAL) AS WELL AS SIMPLE AND COMPOSITE AT VARIOUS SCALE USING MATHEMATICAL MODEL.	GEOREFERENCING, ORTHORECTIFICATION, DEM GENERATION, GEOCODING, MOSAICING, RECTIFICATION, SPATIAL AND RADIOMETRIC (PCA, NDVI, FILTERING, HAZE, NOISE) CORRECTION OF SATELLITE IMAGE.	DEM/ORTHO IMAGE /CONTOUR GENERATION BY STEREO PAIR OF SATELLITE IMAGE AND GPS SURVEY.	BSQ/BIP TO BIL CONVERSION, RADIANCE TO REFLECTANCE CONVERSION, MNF, PPI, N-D ISUALISATION, SAM MTMF, FINAL MAP

TECHNICAL

ERADASE IMAGINE	ARC GIS 10.1	LPS 10	ENVI 4.6	ILWIS 3.3	GEOMATICA	AUTO CAD	MATLAB
--------------------	--------------	--------	----------	--------------	-----------	----------	--------

EXPERIENCE (5 YEARS)**INNODATA ISOGEN PVT.LTD.**

2011

GEOLOGIST AND GIS ENGINEER

1. Thematic Classification of maps as Geological, Geomorphological, Geophysical, Hydrological, Hydrogeological.
2. Georeferencing and tagging of classified maps in RS and GIS Environment.
3. Geospatial adjustment.

PAN INDIA CONSULTANTS PVT. LTD.

2012

HARYANA REMOTE SENSING APPLICATION CENTER, HISSAR**GIS ENGINEER****JOB RESPONSIBILITY (NATIONAL LAND RECORD MODERNISATION PROJECT)**

- 1.Computerization of all land records including mutations, digitization of maps and integration of textual and spatial data.
- 2.Survey/re-survey and updating of land records.
- 3.Computerization of registration and its integration with the land records maintenance system and development of Geospatial Information System (GIS) and capacity building.
- 4.Scanning of Cadastral Maps.
- 5.Digitization of Cadastral Maps.
- 6.Digitization of Imageries.
- 7.Digitization of Captured Survey Data from Digital topographical database to Spatial form.
- 8.Acquisition of digital stereo satellite data of World View-II/Geoeye.
- 9.Establishment of GCP control network by DGPS.
- 10.DEM, Orthoimage and Contour Map generation.
- 11.Collection of existing cadastral maps & Coding/Scanning/Digitization of maps.
- 12.Delineation & confirmation of village boundary.
- 13.Plot level vectorization & map generation from orthoimage.
- 14.Integration of image derived vectors and cadastral vectors (DoLR map) /ROR linking.
- 15.Survey and mapping of difficult areas/ ground truth collection.
- 16.Integration of vectors and preparation of base maps.
- 17.Map/RoR printing (output generation).
- 18.GIS Database Creation.

GUJARAT INFOTECH PVT.LTD

2013

REMOTE SENSING APPLICATION CENTER, LUCKNOW

PROJECT SCIENTIST

JOB RESPONSIBILITY (STATE WATER SANITATION MISSION PROJECT)

1. Procurement of Satellite Data.
2. Processing & Analysis of existing water sources like hand pump, overhead tank etc.
3. Creation of Digital Database of Watershed Boundaries.
4. Validation of the Existing Village Boundary Layer.
5. Georectification of Satellite Data.
6. Mosaicking of Images and Overlaying of Watershed & Village Boundaries.
7. Ground Truth Data Collection.
8. Updating of Hydro geomorphology, Structure (lineament), Soil & Slope map.
9. Watershed-wise water resource action plan generation suggesting the most suitable location of fresh ground
10. Water source & identifying probable area for contaminated source /area of drinking water.
11. Collection of GPS data related to existing water sources like hand pump, overhead tank etc. for all villages.
12. Collection of water samples and carrying out Physico-chemical and Microbiological analysis.
13. Superimposing GPS data of existing water sources like hand pump, overhead tank etc.
14. Preparation of thematic maps in GIS platform.
15. Point data conversion into GIS Platform.
16. Preparation of Point Maps.
17. GPS Survey and GIS /GPS Mapping Using Index Overlay Method.
18. Preparation of point map of contaminated mineral maps of study area.
19. Report Writing.

CURRENT PROJECT WORK- SAC-AHEMADABAD (ISRO-NASA) PROJECT

2016

DESIGNATION -RESEARCH SCHOLAR

DEPARTMENT OF APPLIED GEOLOGY, NATIONAL INSTITUTE OF TECHNOLOGY

Identification, mapping and spectral library generation for hydrothermally altered and weathered clay minerals for Jahajpur region of Bhilwara district, Rajasthan using AVIRIS-NG hyperspectral remote sensing data.

Job-Responsibility-

1. Digital image processing
2. Mineral identification and mapping
3. Geological field survey and sample collection
4. Conventional geological analysis (Spectroscopy, XRD, XRF, ICPMS, Grain size analysis, Petrography)
5. Verification and validation
6. Report writing

Publication-

- Earth system science journal-2009 (Feb, 2009, V-118, PP-88-100)

- NFEST International conference (Jan, 2018, Proceedings-Scopus indexed)

EDUCATIONAL QUALIFICATION

Sr. No.	DEGREE	BOARD/UNIVERSITY	YEAR	DIVISION	SUBJECT
1	HIGH SCHOOL	UP	1996	I	SCIENCE STREAM
2	INTERMEDIATE	UP	1998	II	MATH STREAM
3	B.Sc.	ALLAHABAD UNIV.	2004	III	MATH, PHY., COMP. APP.
4	M.Sc.	ALLAHABAD UNIV.	2006	I	APPLIED GEOLOGY
5	MTech.	ANDHRA UNIV. (IIRS, DEHRADUN)	2011	I	GIS AND REMOTE SENSING
6	Ph.D.	NIT RAIPUR	PURSUING	I	REMOTE SENSING AND GEOLOGY

PROFESIONAL /TRAINING/CERTIFICATE COURSES –

- 1-TRAINING COURSE ON AUTOCAD, RP CAD CENTER, ALLAHABAD.
- 2-TRAINING COURSE ON MATLAB, APPUN TECHNOLOGY, ALLAHABAD.
- 3-APPLICATION OF GEOPHYCAL RECHNIQUES IN GROUND WATER PROSPECTIN (RESISTIVITY METHOD) CGWB, RAIPUR MINSITRY OF GROUND WATER.
- 4-MICROWAVE REMOTE SENSING APPLICATION & ITS APPLICATION, NITR, RAIPUR.
- 5-BASICS OF REMOTE SENSING, GPS & GNSS COURSE IIRS, DEHRADUN
- 6- MICROWAVE REMOTE SENSING APPLICATION & ITS APPLICATION, IIRS, DEHRADUN

MAHESH KUMAR TRIPATHI

M.TECH (GIS AND REMOTE SENSING, GEOSCIENCES)

INDIAN INSTITUTE OF REMOTE SENSING, DEHRADUN

PH. D (Pursuing)

NIT RAIPUR.