### **CURRICULUM VITAE**

# **ABHIJIT GHOSH**

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Contact No- 8250088506

Present Address- Neemrana, Alwar, Rajasthan, 301705

#### **CAREER OBJECTIVE:**

To become a successful Remote Sensing & GIS professional who can meet the commitments, fulfill the goal, and help the organization to grow.

### **EDUCATIONAL QUALIFICATION:**

Qualification Types	Institute / College Name	Board / University	Year of Passing	Marks/CGPA
M.Tech. (GIS)	=	NIIT University	2017	6.69 cgpa
M.Sc. (Remote Sensing & GIS)	=	Vidyasagar University	2015	62.33 %
Graduation (Geography)		Vinoba BhaveUniversity	2013	56.12 %
Higher Secondary	BMHS	W.B.C.H.S.E.	2010	56.60 %
Secondary	BMHS	W.B.B.S. E	2008	54.37 %
Advance Diploma in Information Technology Application	Katwa Youth Computer Center	Department of Youth Services, West Bengal, India	2012	Grade -B

#### **EXPERIENCE:**

- 1. Two-month Internship at Geoinformatics & Remote Sensing Cell, Department Of Science & Technology Government of West Bengal as an Inter-GIS Analyst on 3<sup>rd</sup> June 2016 to 3<sup>rd</sup> August 2016.
- 2. Six Month work as a Research Intern at NIIT University on the project "Understanding the Geomorphology of Martian Surface using Mars Orbiter Mission (MoM) Datasets" sponsored by ISRO from 10<sup>th</sup> January 2017 to 10<sup>th</sup> July 2017.
- 3. Working as a JRF at NIIT University on the project "Modeling the Snow Properties for their Classification and Identification using hyperspectral Remote Sensing" sponsored by the Department of Science and Technology (Project ID.- BDID/01/23/2014-HSRS/25 (SNG-IV)) from August 2017 to September 2020.
- 4. Working as a Guest Faculty (Online) of Center for Remote Sensing &GIS, School of Studies in Earth Science, Jiwaji University, Gwalior-147011(M.P) from Octber 2020 to till.
- 5. GIS & Python instructor at udemy & courser.

### SPECIAL COURSES/TRAINING/WORKSHOP:

Course /Training Name	Venue	Type
Advanced Machine Learning Technique for Climate Information	Center for Soft Computing	International
(Sponsored by IEEE GRSS Kolkata Chapter)	Research, Indian Statistical	Workshop/ Training
	Institute, Kolkata, India	
Imaging Spectroscopy and Application (Sponsored by	ICAR – Indian Agricultural	Training/Workshop
Department of Science and Technology, Government of India)	Research Institute, New Delhi,	
Hyperspectral Thermal Image Unmixing		
2. Learn Hyperspectral Remote Sensing from the Scratch		
3. A Machine learning approach for Object Parameter	GDO III	0.11. 0
Estimation and Discrimination Using Hyperspectral Data	GEO University	Online Courses
4. The Network-Based Method Spectral Unmixing Framework		



#### **PUBLICATION (JOURNAL & CONFERENCE):**

- 1. Artificial neural network-based modeling of snow properties using field data and hyperspectral imagery. Natural Resource Modeling. 2019;e12229. https://doi.org/10.1111/nrm.12229
- 2. Snow and glacial features identification using Hyperion data set and machine learning algorithms. Arabian Journal of Geosciences(AJGS-D-19-01672). (Under final review)
- 3. Deep Learning-Based Supervised Image Classification Using UAV Images for Forest Areas Classification, UASG (2019), IIT Roorkee, 6-7 April 2019 (Accepted for publish in ISRS conference proceedings)
- 4. Application of remote sensing and Machine-Learning Algorithm for Glacier Facies Mapping. 36<sup>TH</sup> International Geological Congress, Theme 9: Symposium 9.4 Remote Sensing of Cryosphere.2019 (Submission accepted)
- 5. Snow Cover Mapping using Two Machine Learning algorithms in the north-western Himalayan of Himachal Pradesh, India. Esri UC 2019 Delhi Chapter.
- 6. Remote Sensing and GIS-Based Snow Avalanche Susceptibility Mapping of the north-western Himalayan. XIV International Geographical Union (IGU)-India, International Conference On Agriculture, Food, Biodiversity, and Health in changing climate. The University of Burdwan. 6-8 March 2020. (Accepted for publishing in Springer conference proceedings)
- The field-based remote sensing sensor systems: SnowFork and ASD Spectroradiometer measurements for the investigation of snow spectral and physical properties; Spectral Library generation. International Journal of Remote Sensing. (TRES-PAP-2020-0500). (Under review)
- 8. Geospatial Distributions of Groundwater Quality for Drinking Purposes of Neemrana, Rajasthan Using Geographic Information System (GIS). International Conference On Sustainable Water Resources Management under Changed Climate. Jadavpur University. 13-15 March 2020.
- 9. Application of Geographical Information System in Transport network analysis: A case study of Kharagpur Municipality, West Bengal India. International Journal of Geographical Information Science. 2019 (Submitted)

### FIELD ACTIVITIES:

- 1. Conducted field visit for ground truth, spectral signatures, physical properties measurements in The Himalayan Region (Manali, Solang Valley, Dhundi, Kothi, and Gulaba) of Himachal Pradesh district, India in the winter season 2017, 2018 and 2019 with the accession of SASE, Defence Research & Development Organization (DRDO) Chandigarh.
- 2. Conducted glacier field visits with the accession of Snow & Avalanche Study Establishment (SASE), Defence Research & Development Organization (DRDO) Chandigarh in the Patsio Glacier of Himachal Pradesh district, India in the summer season 2017 and 2018.
- 3. Conducted field visit for seasonal crop types identification of Neemrana, Rajasthan, India.
- 4. Conducted field visits for check dam analysis of Neemrana, Rajasthan.

### **R&D PROJECTS HANDLED:**

- 1. Analysis of forest cover using Remote sensing & GIS techniques in an open cast mining area, Noamundi Block, Jharkhand. Dr. Jatisankar Bandyopadhyay, Assistant Professor & HOD, Vidyasagar University.
- 2. Application GIS tools for 3D smart campus mapping of infrastructure facility, development planning & monitoring, and navigating of NIIT University. Supervised By Dr. Parul Srivastava, Assistant Professor NIIT University.
- 3. Application of Geo-Spatial technique in Hydrogeology & Ground Water modeling" Case Study in Alwar District, Rajasthan. Supervised By Dr. Mohd Anul Haq Assisote Professor, NIIT University.
- 4. Person Identifier in Emergency and disaster situations using Physical Web emitting URL (Beacon), JavaScript & Google API. Supervised By Dr. Mohd Anul Haq Assisote Professor, NIIT University.
- 5. Identification of Urban Heat Island and Climatic change analysis of Kolkata Metropolitan Area using Geo-Spatial Technique. Supervised By Smt. Aditi Acharya, Senior Scientist, West Bengal State Council of Science & Technology.

### **SKILLS:**

Damata Sanaina & CIS	ArcGIS, ERDAS IMAGINE, ENVI, PCI Geomatica, MapInfo, Qgis, Matlab, ArcGIS Pro,		
Remote Sensing & GIS Software & Tools	IDRISI, Google Earth, ERDAS IMAGINE Radar Mapping Suite, ENVI SAR Scape, Enmap,		
Software & roots	SNAP Tool, Global Mapper, DroneToMap		
Handling Instruments	Dumpy Laval, Plane Table, Prismatic Compass, Theodolite, Stereoscope, Total Station,		
	GPS, Hygrometer, Spectroradiometer, Snow Fork, Rotameter,		
Remote Sensing	Image Processing, Photogrammetry, Hyperspectral, and Microwave Remote Sensing, Advance		
	or Machine Learning-based Classification and Modeling		
GIS	Geo-Spatial database, Geo-Spatial, and Geostatistical Analysis,		
Developer skill	Python, R, ArcObject C#, Java Script, IOT, DBMS, GeoDatabase, Matlab, Andriod Studio,		
	Web GIS, GeoAI,GIS programming or scripting, ML & AI for GIS		

# PERSONAL DETAILS

Name	Abhijit Ghosh
Father's Name	Anil Ghosh
Date Of Birth	21 <sup>st</sup> July 1992
Gender	Male
Marital Status	Single
Languages Known	English, Bengali, Hindi
Address	Katwa, Purba Bardhaman, West Bengal

# **DECLARATION**

I, Abhijit Ghosh, hereby declare that all the above-mentioned statements are true to my knowledge and belief.

Place: Neemrana, Rajasthan Date: 17<sup>th</sup> February, 2021

(Abhijit Ghosh)