

# Ajoy Karmakar

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Education	<b>Indian Institute of Remote Sensing, India</b> <i>Master of Technology in Remote Sensing &amp; GIS</i> <i>Specialization:</i> Forest Resources and Ecosystem Analysis <i>Dissertation:</i> Impact of Fire on Carbon Flux in North Western Himalaya Advisor: Dr. Taiabanganba Watham	<b>Aug 2023–June 2025</b>
	<b>Sidho-Kanho-Birsha University, WB, India</b> <i>Master of Science in Environmental Science</i> <i>Specialization:</i> Remote Sensing <i>Dissertation:</i> Assessing the anthropogenic and Climate Change Drivers in Shaping Landscape Advisor: Dr. Tarakeshwar Senapati	<b>Aug 2021–June 2023</b>
	<b>Bankura Sammilani College, WB, India</b> <i>Bachelor of Science in Zoology Programme</i> <i>Dissertation:</i> Waterbody Assessment using Water Quality Index and Zooplankton Diversity Advisor: Dr. Surajit Majumder	<b>Aug 2018– July 2021</b>

Research Interests	<b>Measurements and modeling of Carbon and Hydrological Flux:</b> Tower mounted eddy covariance, time-frequency analysis of land-atmosphere interactions <b>Remote Sensing, Climate Change</b>
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Reserach Experience	<b>Junior Research Fellow</b> <b>G. B. Pant National Institute of Himalayan Environment, India</b> <i>Project:</i> Carbon Budget and Eco-hydrological Dynamics of Selected Himalayan High-altitude Grasslands and Their Carrying Capacity PI & Advisor: Dr. Sandipan Mukherjee Conducting field campaigns, analyzing flux tower eddy covariance data, and contributing to land-atmosphere coupling research • Maintaing Flux Tower	July 2025–present
	<b>Post Graduate Researcher</b> <b>Indian Institute of Remote Sensing, India</b> Conducted field visits, data collection, analyzed eddy covariance flux data	July 2024–June 2025
	<b>Research Intern</b> <b>CSIR - Central Mechanical Engineering Research Institute, India</b> Conducted plastic pyrolysis and gas chromatography to enhance carbon recovery.	April 2023– June 2023
		• Flux Tower Data Analysis

Skills	<b>Programming</b>	: Python, Bash, Julia
	<b>Models</b>	: CESM-CLM, CliMA Land, LUE
	<b>Remote Sensing &amp; GIS</b>	: ERDAS Imagine, ENVI, 3D Forest, SNAP, ArcGIS, QGIS
	<b>Software and Tools</b>	: GEE (Python & JS), Linux, GrADS, CDO, LaTeX, MS Office
	<b>Others</b>	: Flux Tower Maintenance & Data Handling, Sap Flow Meter

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Publications	Assessing the waterbodies through water quality index and zooplankton diversity for environmental sustainability of Bankura, West Bengal, India. 2024 Mahanty S, Saha D, Karmakar A, et al. AGBIR. 2024;40(2):1021-1029.
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Professional Experience	Project Intern	Feb 2025– April, 2025
	Equatior Geo PVt. Ltd., India	
	<i>Projects:</i> the Race to Net Zero Contributed with Remote Sensing and GIS with the related project • Google Earth Engine • Carbon & Other GHGs	
	RS-GIS Intern	Oct 2023– Dec 2023
	Stand For Forests Foundation, India	
	Contributed with RS & GIS in Various Project	

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Achievements	Qualified Graduate Aptitude Test in Engineering (GATE)	2024 & 2025
	<i>Subject:</i> Geomatics Engineering (GE)	