Pretom Saha

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EDUCATION

Bachelor of Science   *Awarded: March 2024*
Department of Oceanography
Shahjalal University of Science and Technology, Sylhet   *CGPA- 3.52/4.00*

RESEARCH INTEREST

Geographic Information Systems (GIS), Remote Sensing, Geospatial Artificial Intelligence.

RESEARCH EXPERIENCE

Undergraduate Project
Dynamics of Shoreline Changes on Bhasan Char Island, Bangladesh: A Comprehensive Analysis from 2005 to 2023 Utilizing DSAS and GIS

- Performed automatic shoreline extraction on Bhasan Char Island using the Google Earth Engine JS API to quantify shoreline changes over time.
- Analyzed satellite imagery (Sentinel-2, Landsat) to assess the rates of erosion and accretion, providing critical insights into the dynamics of shoreline change.

Keywords: Shoreline Dynamics, Digital Shoreline Analysis System (DSAS), Geographic Information System (GIS).

Academic Project
Land Use and Land Cover Change Detection of Kutubdia Island using RS-GIS tools

- Utilized RS-GIS tools to create classification maps and detect land use and land cover changes on Kutubdia Island.

Research Assistant
Space and Environment Research Center (SERC), Bangladesh

- Conducted remote sensing analysis to monitor mangrove forest dynamics using multi-temporal satellite imagery.

POSTER PRESENTATION

- Pretom Saha, Abu Bokkar Siddique. *"Dynamics of Shoreline Changes on Bhasan Char Island, Bangladesh: A Comprehensive Analysis from 2005 to 2023 Utilizing DSAS and GIS."* ICO 2024: International Conference on Oceanography, BORI, Cox's Bazar, Bangladesh.

DOI

TECHNICAL SKILLS

GIS and Remote Sensing Skills	– Satellite/Digital Image Analysis
	– Spatial Statistical Analysis
Programming Language	– Python, Google Earth Engine
RS/GIS Software Skills	– ESRI ArcGIS Pro, ArcMap
	– QGIS
	– ERDAS IMAGINE
	– ENVI
Oceanographic Tools	– Grab Sampler, Water Multi-parameter
	– Mini CTD
	– Plankton Net
	– Algal Torch
Languages	– English
	– Bangla

CERTIFICATIONS

Volunteer: *"International Symposium on Marine Resource Management"* by Shahjalal University of Science and Technology, Sylhet

STANDARDIZED TEST SCORES

IELTS – Overall Band: 7.5
Listening: 8.0, *Reading:* 8.0, *Speaking:* 7.0, *Writing:* 6.5

REFERENCES

Abu Bokkar Siddique (Project Supervisor)
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Dr. Subrata Sarker (Head of Department)
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