

Puspendu Biswas Paul

Prospective Graduate Student

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[LinkedIn](#) [ORCID](#) [ResearchGate](#) [Google Scholar](#)

Professional Summary

A highly motivated and dedicated professional with a strong background in Synthetic Aperture Radar (SAR) data, Artificial Intelligence (AI), and remote sensing. Committed to leveraging advanced technologies to address complex geospatial challenges. Expertise includes developing AI-driven models for SAR data analysis, enabling enhanced environmental monitoring and disaster management. Passionate about continuous learning and collaboration to drive innovation in the geospatial field, with proficiencies in SNAP software, GNSS-R, and the use of Chinese satellite systems.

Education

Masters in Space Technology Applications (Remote Sensing and GIS)

Beihang University, Hangzhou, China (Recipient of the Chinese Government Scholarship)

B.Sc in Agricultural Engineering

Sylhet Agricultural University, Sylhet, Bangladesh

January 2018 - January 2023

Technical Skills

Languages & Databases:

- Python
- JavaScript
- C/C++ (Arduino)
- MySQL

Data Analysis & AI:

- Deep Learning
- Using AI efficiently
- Investigative Research
- Scientific Writing
- Statistical Analysis

Remote Sensing & GIS:

- ArcGIS Pro
- Google Earth Engine
- SNAP

Satellite & Engineering:

- SAR
- GNSS-R
- Weather Satellite Data
- Use of Chinese satellite systems
- SolidWorks
- AutoCAD 2D

Certifications:

- Data Visualization using Bokeh
- Introduction to GIS Mapping
- GIS, Mapping, and Spatial Analysis Capstone
- UN International Workshop on GIS Technology and Application

IELTS Score

Overall 7.5

- Listening: 8.5
- Reading: 8.0
- Writing: 6.5
- Speaking: 7.0

Professional & Academic Journey

Intern

RIMES - Regional Integrated Multi-hazard Early Warning System, Dhaka, Bangladesh

August 2023 - December 2023

- Contributed to a dynamic team focused on disaster preparedness and early warning systems.
- Gained hands-on experience in data analysis, modeling, and risk assessment.

Research Assistant

Sylhet Agricultural University, Sylhet, Bangladesh

March 2021 - January 2023

- Managed data for drought prediction, conducted statistical analysis, and maintained lab equipment.

Volunteering & Pro Bono Work

Researcher (Voluntary)

National Oceanographic And Maritime Institute (NOAMI), Dhaka, Bangladesh

April 2025 - Present

- Engaged in GIS, Mapping, and Spatial Analysis projects as a voluntary contributor.

Publications

- Remote sensing based impact assessment of 2024 Monsoon flood in the South-east Bangladesh (Submitted)
- Spatio-Temporal Dynamics and Machine Learning-Based Hotspot Classification of Artificial Light at Night in Nigeria (2014-2024): An AI assisted Geospatial Analysis. (Ongoing)
- Spatio-Temporal Dynamics and Machine Learning-Based Hotspot Classification of Artificial Light at Night in Bangladesh (2014-2024): An AI assisted Geospatial Analysis. (Ongoing)
- Lunar Orbit design for Sustainable Cislunar Applications (ongoing)
- Evaluating the socio-economic conditions of fishers and sustainability of small-scale fisheries in the Kalni River, Bangladesh (Published)
- Data-Driven Decision Making for Smart Cultivation (Published)
- Seasonal Variations in Water Quality and Microplastic Contamination in the Surma River, Bangladesh (Published)
- BD-Freshwater-Fish: An Image Dataset from Bangladesh for AI-Powered Automatic Fish Species Classification and Detection toward Smart Aquaculture (Published)
- Impact of water pollution on physio-chemical properties for fish habitat in the Surma River, Sylhet city, Bangladesh (Published)
- Assessing Total Dissolved Oxygen and Electrical Conductivity Using Sentinel-2 Remote Sensing: A Multivariable Approach to Flood Detection in Flood Prone Urban area Sylhet (Published)

Honors and Awards

- Chinese Government Scholarship
- UN International Workshop on GIS Technology and Application (Certificate of Completion from United Nations Global Geospatial Knowledge and Innovation Centre,

June 2025)

- IEEE iSES Conference (Participant in the International Symposium on Smart Electronic Systems)

Extra-Curricular Activities

- Yellow Belt, Karate (Achieved Yellow Belt from Shotokan Karate International Federation)
- Photography (Active photographer with the Jessore Photographic Society)

References

Sheikh Tawhidul Islam

Professor, International
Innovation Institute, Beihang
University, China.

My Master's Supervisor

<https://www.linkedin.com/in/sheikh-tawhidul-islam-927624254/>

Dr. Mohan Kumar Das

Research Fellow, National
Oceanography and Maritime Institute
(NOAMI)

Supervised me directly in NOAMI
projects

<https://www.linkedin.com/in/dr-mohan-kumar-das-5a225927/>

Md. Jamal Uddin Khan

PhD · PostDoc at Université Toulouse
III - Paul Sabatier, France

Worked under him in several projects

<https://www.researchgate.net/profile/Md-Jamal-Uddin-Khan>