

Farzana Jamal

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[Portfolio](#)

[LinkedIn](#) [ResearchGate](#)

RESEARCH INTEREST

Geospatial Science, GIS & Remote Sensing, Land Use Land Cover, Web GIS

ACADEMIC BACKGROUND

MS in Geography and Environmental Studies

University of Chittagong, Chattogram – 4331, Bangladesh
CGPA: **3.90**

March 2024 – August 2025

BSc. in Geography and Environmental Studies

University of Chittagong, Chattogram – 4331, Bangladesh
CGPA: **3.66**

March 2019 – March 2024

WORK EXPERINCE

Voluntary Research Assistant (Remote)

Department of Civil and Environmental Engineering, College of Engineering
King Faisal University
Al-Ahsa 31982, Saudi Arabia

April 2024 – Present

Research Assistant

Department of Geography and Environmental Studies
University of Chittagong, Bangladesh

January 2024 – July 2025

Research Assistant

Geospatial Health Research Group
The Center for Health Innovation, Research, Action and Learning – Bangladesh

April 2024 – June 2024

Intern

Geospatial Health Research Group
The Center for Health Innovation, Research, Action and Learning – Bangladesh

January 2024 – March
2024

SKILLS

Technical Skills

ArcGIS Pro, QGIS, R programming
Certification

Fundamentals of GIS (Coursera); University of California, Davis; Completed the course
on March 24, 2024; Grade received: **96.80%**; Link: <https://bit.ly/4ojEhSY>

Computer Skills

Microsoft Office package: **Microsoft Word, Excel, PowerPoint, Access**

Language Skills

- Mother tongue: BENGALI
- Other language: ENGLISH

IELTS: Overall Band Score: **7.0** (L: 7.00, R: 6.00, W: 6.5, S: 7.5)

THESIS (MS)

Impact of Sea Level Rise on the Coastal Urban Configuration: A Case Study on the Coastal Belt of
Chattogram City, (2025)

ACADEMIC RESEARCH PROJECTS (FIELD WORK)

- (1) Climate change and its impact on livelihood of local people of the Sundarbans, Khulna, (2023)
- (2) Soil Characteristics and Agricultural Pattern in Khadim Nagar Union, Sylhet, Bangladesh, (2022)
- (3) A Study on Morphological and Ecological Characteristics of Guliakhali Beach, Chattogram, (2021)
- (4) Land use and Land use changing pattern - A case study in Feni Pouroshava, Chattogram, (2019)

PUBLICATIONS

- (1) Rahman, M. S., Mitra, B., **Jamal, F.**, Rahman, M. H., Rahman, S. M., & Rahman, M. M. (2025),
(Accepted with minor revisions), Interpretable Machine Learning for PM2.5 Prediction in South Asia: A
Bayesian-Optimized Extra Trees Approach with SHAP. **Remote Sensing Applications: Society and
Environment**

(2) Mitra, B., Uddin, M. S., **Jamal, F.**, Mahmud, K., Rahman, S. M., & Rahman, M. M. (2025), (Accepted with minor revisions) Modeling Future CO2 Trajectories in Fast-Growing Asian Economies: Synergizing Deep Learning and Shared Socioeconomic Pathways. **Climatic Change**.

(3) Haider, M. A., **Jamal, F.**, Uddin, M. M. (2024), A Geographical Appraisal of Mirsharai Pourashava, Chattogram. **CUS Bulletin on Urbanization and Development**.

<http://dx.doi.org/10.13140/RG.2.2.33149.58085>

(4) Hossain, M. J., Tuhin, M. A. A., Mim, N. A., Akter, N., **Jamal, F.**, Mehjabin, K., Sakib, M. N., (2024) Exploring the Factors Influencing Heat Stress Risks Using Discomfort Index Method in Bangladesh, **International Conference on Environmental Science and Resource Management**.

<http://dx.doi.org/10.13140/RG.2.2.25013.08160>

ONGOING/SUBMITTED RESEARCH PROJECTS

(1) **Jamal, F.**, Haider, M. A., & Akter, H., (2025), (Under Review) Assessing the Impact of Sea Level Rise on Coastal Urban Form and Infrastructure: A Case Study of Chattogram City's Vulnerable Coastal Belt.

Remote Sensing

(2) Mahmud, K., Mitra, B., Tiwari, S.P., Uddin, M. S., **Jamal, F.**, Rahman, S. M., & Rahman, M. M. (2025), (Under Review) Environmental Drivers of Chlorophyll-a in the Arabian Gulf: A Bayesian-Optimized Decision Tree Ensemble Modeling Approach. **Earth Systems and Environment**

CONFERENCES AND SEMINARS

16/05/2024 – 17/05/2024 Tangail-1902, Bangladesh

(1) **International Conference on Environmental Science and Resource Management 2024**

- Evaluated heat stress in Bangladesh (2003–2023) using the **Discomfort Index** and satellite datasets.
- Identified increasing summer discomfort, underscoring the need for targeted **public health** measures.

24/04/2024 Delft, Netherlands

(2) **Water Action Agenda Symposium (Hybrid)**

- Attended symposium on **sustainable water management**, gained insights on strategy implementation.
- Learned about the pivotal **role of youth** in advancing effective **water action**.

HONOURS AND AWARDS

(1) **National Science and Technology (NST) Fellowship, 2024 – 25**. Link: <https://bit.ly/4mKpEXx>

- Issued by **Ministry of Science and Technology (MoST)**, People's Republic of Bangladesh.
- Was granted this fellowship for the purpose of conducting **master's thesis**.

(2) **Education Scholarship (General), 2025**.

- Issued by **Directorate of Secondary and Higher Education**, People's Republic of Bangladesh.
- Was granted this scholarship for **excellence in BSc. (Honours) result**.

REFERENCES

Dr. Syed Masiur Rahman
Associate Professor,
Applied Research Center for
Environment & Marine Studies,
King Fahd University of
Petroleum & Minerals,
Dhahran 31261, Saudi Arabia;
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Dr. Muhammad Muhitir Rahman
Associate Professor,
Department of Civil and
Environmental Engineering,
College of Engineering,
King Faisal University,
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Dr. Mohammad Shahedur Rahman
Assistant Professor
Department of Civil Engineering,
College of Engineering,
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Riyadh 11432, Saudi Arabia;
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