Farzana Jamal

Address: Halishahar, Chattogram – 4100, Bangladesh.

Phone: +8801754014059, Email: farzanajamal.ges@gmail.com

RESEARCH INTEREST

Geographic Information Science & Remote Sensing, Climate Change Modelling, Web GIS

ACADEMIC BACKGROUND

MS in Geography and Environmental Studies

University of Chittagong, Chattogram – 4331, Bangladesh

CGPA:

BSc. in Geography and Environmental Studies

University of Chittagong, Chattogram – 4331, Bangladesh

CGPA: 3.66

WORK EXPERINCE

Voluntary Research Assistant (Remote)

Department of Civil and Environmental Engineering, College of Engineering

King Faisal University

Al-Ahsa 31982, Saudi Arabia

Research Assistant

Department of Geography and Environmental Studies

University of Chittagong, Bangladesh

Research Assistant

Geospatial Health Research Group

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

Intern

Geospatial Health Research Group

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

SKILLS

ArcGIS Pro, QGIS, R programming **Technical Skills**

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) 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.

LinkedIn ResearchGate

March 2024 – August 2025

March 2019 - March 2024

April 2024 – Present

January 2024 – July 2025

April 2024 – June 2024

January 2024 – March

2024

(2) 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

(3) 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 Applications: Society and Environment**
- (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**
- (3) Rahman, M.S., Mitra, B., **Jamal, F.**, Rahman, M. H., & Rahman, M. M., & Rahman, S. M., (2025), (Under Review) A Hyperparameter tuned Boosted Regression Approach for PM2.5 Prediction in South-Asian Cities Using Meteorological Land-cover and Socioeconomic Factors. **Remote Sensing**

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. Muhammad Muhitur Dr. Syed Masiur Rahman Associate Professor, Rahman Applied Research Center for Associate Professor, Environment & Marine Studies, Department of Civil and King Fahd University of Environmental Engineering, Petroleum & Minerals, College of Engineering, Dhahran 31261, Saudi Arabia; King Faisal University, Al-Ahsa 31982, Saudi Arabia; smrahman@kfupm.edu.sa Contact: mrahman@kfu.edu.sa