#### **CURRICULUM VITAE**

#### AL-EKRAM ELAHEE HRIDOY

Department of Geography and Environmental Studies, University of Chittagong

**♥** Chittagong, Bangladesh

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#### **EDUCATION**

**B. Science** Geography and Environmental Studies, University of Chittagong, Chittagong,

Bangladesh

**GPA (3 years average)** 3.35 / 4.00

**GRE and TOEFL** I plan to sit soon.

## **PUBLICATIONS**

#### Peer reviewed

- 1. Hridoy, A. E. E., Mohiman, M. A., Tusher, S. M. S. H., Nowraj, S. Z. A., & Rahman, M. A. (2021). Impact of meteorological parameters on COVID-19 transmission in Bangladesh: a spatiotemporal approach. *Theoretical and Applied Climatology*, 1-13.
- 2. Hridoy, A. E. E., Tipo, I. H., Sami, M. S., Babu, M. R., Ahmed, M. S., Rahman, S. M., ... & Naim, M. (2021). Spatio-temporal estimation of basic and effective reproduction number of COVID-19 and post-lockdown transmissibility in Bangladesh. *Spatial Information Research*, 1-13
- 3. Alam, E., Hridoy, A. E. E., & Naim, M. (2021). Factors Affecting Small-Scale Fishers Adaptation toward the Impacts of Climate Change: Reflections from South Eastern Bangladeshi Fishers. *International Energy Journal*, 21(1A)

## **Preprints**

- 1. Hridoy, A. E. E., Naim, M., Emon, N. U., Tipo, I. H., Alam, S., Al Mamun, A., & Islam, M. S. (2020). Forecasting COVID-19 Dynamics and Endpoint in Bangladesh: A Data-driven Approach. *medRxiv*.
- 2. Hridoy, A. E. E., Naim, M., Alam, E., Emon, N. U., Tipo, I. H., Tusher, S. M. S. H., ... & Islam, M. S. (2020). Estimation of Effective Reproduction Number for COVID-19 in Bangladesh and its districts. *medRxiv*.

#### **Submitted**

- 1. Journal: Science of the Total Environment
  - Title: Tracing spatial and temporal dynamics of the air quality of the Red Sea based on satellite observations.
- 2. Journal: Meteorology and Atmospheric Physics
  - Title: Climate Change in Bangladesh: Temperature and Rainfall Climatology of Bangladesh for 1949–2013 and its implication on rice yield.
- 3. Book Chapter: Routledge Hurricane
  - Title: Impacts of storm surges in society and recent advances on risk management.

# **Latest Project Engagement**

- 1. Impacts of COVID-19 on air pollution, human mobility and activities in 9 major cities of Nigeria.
- 2. Coupling nexus and circular economy to decouple carbon emissions from economic growth.
- 3. Predicting COVID-19 incidence using mobility data in Saudi Arabia: a machine learning approach.

## **EXPERIENCE**

Research Assistant, King Fahd University of Petroleum & Minerals, KSÁ

Jan 2021- Present

I'm working as a remote research assistant at Dr. Syed Masiur Rahman's Lab.

Python Programming and Data Science Instructor, Institute of Forestry and

Sep 1 2021 - Present

Environmental Sciences, CU (IFESCU), Bangladesh.

I am conducting a training on Python programming language, data analysis and visualization, machine learning algorithms and Google Earth Engine.

Python and Data Analysis Instructor, Bangladesh Agriculture University, Bangladesh

Jun 9 2021 - June 23 2021

I conducted a training on Python programming language, exploratory data analysis, data visualization, and statistical modeling in Python.

visualization, and statistical modeling in Python

Research Assistant, Disaster and Development Organizations (DADO), Chattogram, Jun 20

Jun 2019 – December 2020

Bangladesh

My research focuses were climate change, climate change adaptation and natural disasters.

Frontend Web Developer, Fiverr

Feb 2017 – May 2018

Freelance web developer.

## **SKILLS**

Languages: Python, JavaScript, R

Data Science Tools: Scikit-Learn, TensorFlow, Pandas, NumPy

Deep learning: TensorFlow, Keras

GIS tools: QGIS

Spatial data science tools: Geoda, PySal, GeoPandas, Leaflet

Database Language: SQL, Big Query, PostGIS Remote Sensing tool: Google Earth Engine (GEE)

#### **Volunteer COVID-19 RESPONSE**

1. Second COVID-19 tracker in Bangladesh, web mapping and SEIR based epidemiological modelling of COVID-19 (Bengali language).

Work: https://wolf-dev.github.io/bdcovid19/index.html

2. COVID-19 Effective reproduction number (Rt) in Bangladesh and spatial clustering of Rt.

Work: https://github.com/wolf-dev/Rt\_Bd

3. Predicting COVID-19 transmission in Bangladesh using mobility data: a machine learning approach.

Work: https://github.com/wolf-dev/COVID\_mobility\_BD

4. Sentiment Analysis of Public Opinion on Vaccination in Bangladesh using Twitter data.

Work: https://github.com/wolf-dev/Sentiment\_COVID\_bd

## REFERENCE

1. Dr. Syed Maisur Rahman

Affiliation: Center for Environment & Water, Research Institute, King Fahd University of Petroleum & Minerals, Dhahran 31261, Saudi Arabia

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2. Dr. Mohammad Mosharraf Hossain

Affiliation: Institute of Forestry and Environmental Science, University of Chittagong, Chittagong,

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