

Anmol Haque

Blacksburg, Virginia, USA | (540) 750-1027 | anmol91@vt.edu

EDUCATION

Virginia Tech, College of Engineering

PhD. Civil and Environmental Engineering

Specialization: Coastal Engineering and Disaster Risk and Resilience

Advisor: Dr. Jennifer L. Irish

Blacksburg, Virginia
Expected December, 2021

Bangladesh University of Engineering Technology (BUET)

MS Water Resources Engineering

Specialization: Coastal Engineering

Dhaka, Bangladesh
May 2018

BS Water Resources Engineering

September 2015

TEACHING EXPERIENCE

Virginia Tech

Graduate Teaching Assistant, Department of Civil and Environmental Engineering

Blacksburg, Virginia

- CEE 3304 Fluid Mechanics August 2017 - December 2017
 - Led recitation classes for 30+ students ensuring effective student learning
 - Guided students through class test reviews, assignments with constructive feedback
- CEE 4314 Groundwater Resources August 2017 – December 2017
 - Guided students through homework assignments with constructive feedback and solutions
 - Responsible for grading assignments and class tests as part of assessment evaluation
 - In charge of proctoring during class test and exams
- CEE 5304 Environmental Fluid Mechanics August 2019 – December 2019
 - Guided students through assignments and graded assignments to ensure effective student learning
- CEE 4384 Coastal Engineering/ CEE 5854G Advanced Coastal Engineering January 2020 – March 2020
 - Guided students through assignments with constructive feedback and solution
 - Graded assignments and class tests as part of assessment evaluation
 - Conducted exam review class with one-to-one feedback and guidance
 - Tracked students' class records and lab attendance ensuring students' presence

RESEARCH EXPERIENCE

Virginia Tech

Graduate Research Assistant, Coastal Hazards @ Virginia Tech, Civil Engineering

Blacksburg, Virginia
August 2017- Present

The Coastal Hazards @ Virginia Tech conducts research on coastal issues focusing in disaster resilience, coastal hazard assessment, process sedimentology and natural infrastructure.

- Investigated sediment transport using a dam-break model as a proxy for tsunami and storm sediment movement under the NSF funded project titled "Collaborative Research: Tsunami and tropical storm sediment dynamics and products"; project budget ~ \$320K
- Actively involved in collaborating with faculty members beyond current discipline involving interdisciplinary research on coastal disasters
- A Disaster Resilience and Risk Management (DRRM) scholar under the National Science foundation (NSF) funded project "NRT: Disaster Resilience and Risk Management"; project budget ~\$2.9M
- Leading the development of a conceptual storm surge and wind risk assessment framework with an emphasis on integrating social and physical vulnerability for more accurate risk assessment
- Conducting assessment using quantitative tools (python and ArcGIS) for coastal flood hazard due to storm surge for parts of Hampton Roads, Virginia and parts of Maryland through the National Science foundation

(NSF) funded project "Assessing the Impacts of Coastal Flood-Induced Relocation on Local Jurisdictions"; project budget ~ \$325K

PROFESSIONAL EXPERIENCE

Institute of Water Modelling

Junior Engineer

Dhaka, Bangladesh
May 2016- July 2017

- "Coastal Embankment Improvement Project- Phase I (CEIP-I). Under this project, selected 17 coastal polders (embankments) were upgraded and rehabilitated with the financial support from World Bank.
- "Feasibility Study for the Improvement and Restoration of Navigability for Burishwar-Paira, Old Brahmaputra, Dharala, Dudhkumar, Punarhaba, Tulai and Showa River". Under this project the dredging volumes for these rivers were calculated. Based on prior conducted morphological study the feasibility of restoration through dredging was assessed.

HONORS AND AWARDS

1. IGEP DRRM Fellowship (2018)
2. G.V Loganathan Memorial Graduate Fellowship (2017-2018)
3. Research Fellow, BUET-JIDPUS (2016-2017)
4. Dean's List, Bangladesh University of Engineering and Technology (2010-2013)
5. University Merit Scholarship (Technical Division), Bangladesh University of Engineering and Technology (2010-2015)

LEADERSHIP

Treasurer, Student Chapter EWRI-COPRI, Virginia Tech

August 2018- August 2020

Board Member and Treasurer, Association for Bangladeshi students (ABS) @VT August 2019 –April 2020

INVITED LECTURES

Virginia Tech, Department of Civil and Environmental Engineering

October 1st, 2019 – October 10th, 2019

- CEE 3304 Fluid Mechanics

CONFERENCES AND ABSTRACTS

- Haque, A., Irish, J.L., & Zhang, Y. (2020). An Idealized Post-Disaster Recovery Study of a Coastal Community to Storm Hazards. Natural Hazards Workshop, Colorado, USA, 2020.
- I. Young Coastal Scientists and Engineers Conference-Americas (YCSECA), Merida, Mexico, 2018.
- Haque, A., Irish, J.L., & Weiss, R. (2018). Studying the inundation (hydrodynamic) forcing on the sediment structure on a 1D-sediment model. Young Coastal Scientists and Engineers Conference-Americas (YCSECA), Merida, Mexico, 2018.
- Haque, A., Navera, U.K., Haider, M.R. (2016), "Developing a semi-Distributed Hydrological Model and Rainfall Frequency Analysis of Bangshi River Basin", 3rd International Conference on Civil Engineering for Sustainable Development (ICCESD 2016), 12~16 February, KUET, Khulna, Bangladesh (ISBN: 978-984-34-0265-3).

TECHNICAL REPORTS

- IWM. (2016). Technical Report on Storm Surge, Wave, Hydrodynamic Modelling and Design Parameters on Drainage System and Embankment Crest Level. Volume III:Package-3.

PROFESSIONAL CERTIFICATIONS AND TRAINING

Certifications: Future Professoriate Certificate, Graduate School, Virginia Tech (2020)

Training Workshops: Basic ArcGIS, Institute of Water Modelling, Bangladesh (2017)

PROFESSIONAL AFFILIATIONS

Student Member, Coasts, Oceans, Ports and Rivers Institute, American Society of Civil Engineers (2017)