

# Naveel Islam

PhD Student

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## Academic Qualifications

Degrees	Name of the Institution	Duration of Degree
PhD in Geotechnical Engineering	University of Alberta (UofA) Edmonton, Alberta, Canada	January 2020- Present
Master of Engineering (Research Based) (Geotechnical Engineering)	Memorial University of Newfoundland (MUN), St John's, Newfoundland, Canada	September 2014-May 2017
B.Sc. Civil Engineering (Major-Geotechnical Engineering, Minor-Structural Engineering)	Bangladesh University of Engineering & Technology (BUET), Dhaka, Bangladesh	January 2008- February 2013

## Research Publications

- Wang, C., Hawlader, B., **Islam, N.** and Soga, K. 2019. Implementation of a Large Deformation Finite Element Modeling Technique for Seismic Slope Stability Analyses. *Soil Dynamics and Earthquake Engineering, Elsevier*, <https://doi.org/10.1016/j.soildyn.2019.105824>
- **Islam, N.**, Hawlader, B., Wang, C. and Soga, K. 2018. Large Deformation Finite Element Modeling for Earthquake-Induced Landslides Considering Strain-Softening Behavior of Sensitive Clay. *Canadian Geotechnical Journal*, <https://doi.org/10.1139/cgj-2018-0250>
- **Islam N**, Roy K S, Hawlader B. 2019. Modeling the Impact of Earthquake-Induced Sensitive Clay Landslide on an Exposed Pipeline Using a Large Deformation Finite Element Method. The 72nd Canadian Geotechnical Conference, GeoSt.John's2019, St. John's, N. L., Canada, Sept 29-Oct 2
- Alam M K, **Islam N**, Abedin M Z, Dey R, Islam M S. 2019. Prediction of Compressibility Characteristics of In-situ Cohesive Soil using Reconstituted Sample. The 72nd Canadian Geotechnical Conference, GeoSt.John's2019, St. John's, N. L., Canada, Sept 29-Oct 2
- Dey R, Rahman M A, **Islam N**. 2019. A coupled numerical approach for assessing the bearing capacity of an eccentrically loaded foundation on layered cohesionless soil near a slope. The 72nd Canadian Geotechnical Conference, GeoSt.John's2019, St. John's, N. L.,Canada, Sept 29-Oct 2
- **Islam N.** and Hawlader B. 2016. Pseudostatic Seismic Slope Stability Analyses using a Large Deformation Finite Element Modeling Technique. The 69<sup>th</sup> Canadian Geotechnical Conference, Geovancouver 2016, Vancouver, B. C., Canada, Oct 2-5
- **Islam, N.**, Islam, K., Rahman, M.M. and Al-Hussaini, T.M. 2017. Seismic Vulnerability Assessment of Reinforced Concrete School Buildings in Chittagong City Corporation, Proceedings of International Conference on Disaster Risk Mitigation (ICDRM-2017), September 23-24, 2017, Dhaka, Bangladesh

- Khair, A., Rahman, M.S., **Islam, N.**, Islam, K., Muniruzzaman, S.M., and Ahsan, R. 2017. Vulnerability Assessment of an Existing Jetty at Chittagong Dockyard, Proceedings of International Conference on Disaster Risk Mitigation (ICDRM-2017), September 23-24, 2017, Dhaka, Bangladesh.
- Sajjad, S., Yakiny A., **Islam, N.** and Al-Hussaini, T.M. 2017. Stability analyses of an existing road embankment over soft soil deposit". Proceedings of International Conference on Disaster Risk Mitigation (ICDRM-2017), September 23-24, 2017, Dhaka, Bangladesh.
- **Islam N.**, Roy K. S., Islam K., Hossain M. I. and Zohora F. T. 2015. A comparative study of Seismic Risk Assessment Procedures for Existing Residential Buildings of Dhaka City. First International Conference on Advances in Civil Infrastructure and Construction Materials (CICM 2015), MIST, Dhaka, Bangladesh, Dec 14-15
- **Islam N.**, Roy K. S., Islam K., Imran M. and Hoosain A. 2015. Seismic Vulnerability Assessment of Existing Reinforced concrete residential buildings by Japanese Method. First International Conference on Advances in Civil Infrastructure and Construction Materials (CICM 2015), MIST, Dhaka, Bangladesh, Dec 14-15
- **Islam N.**, Alam M. J. and Hossain A.S.M. F. 2015. One Dimensional Seismic Ground Response Analyses for soil in Dhaka and Khulna region. First International Conf. on Advances in Civil Infrastructure and Construction Materials (CICM 2015), MIST, Dhaka, Bangladesh, Dec 14-15
- **Islam N.**, Roy K. S. and Islam K. 2015. Use of Design of Experiment in Seismic Vulnerability Assessment for Existing R.C. Buildings by Japanese Method, Fifth International Conference on Geotechnique, Construction Materials and Environment, Osaka, Japan, Nov. 16-18
- Roy K. S., Islam K., Hassan J. and **Islam N.** 2015. Application of Fuzzy Set Theory to Seismic Vulnerability Assessment, Fifth International Conference on Geotechnique, Construction Materials and Environment, Osaka, Japan, Nov. 16-18
- Hossain S. M. F., **Islam N.** and Ansary M.A. 2015. Use of PS Logging and Seismic Ground Response Analysis using DEEPSOIL in BUET-JIDPUS, BUET, Dhaka, International Journal of Innovative Science and Modern Engineering (IJISME), Volume-3 Issue-3, ISSN: 2319-6386

## Relevant Work Experiences

- *Teaching Experience*

Position	Organization	Duration	
		From	To
Instructor	Department of Civil Engineering, Military Institute of Science & Technology, Dhaka, Bangladesh	28/01/2017	29/12/2019
Teaching Assistant	Department of Civil Engineering, Memorial University of Newfoundland, Canada	05/01/2015	17/12/2016
Instructor	Department of Civil Engineering, Presidency University, Dhaka, Bangladesh	19/01/2014	31/08/2014
Instructor	Department of Civil Engineering, Stamford University, Dhaka, Bangladesh	19/08/2013	19/01/2014

- **Research Experiences**

- Broad Scale institutional research on, 'Geotechnical Investigation along the Coastal Hazard Assessment areas of Bangladesh', Ministry to Science and Technology, Bangladesh funded project (January 2019- December 2019)
- Broad Scale institutional research on, 'Landslide Inventory Mapping and Investigation on major Chittagong hill tracts landslides, Bangladesh. (April 2018- April 2019)
- Research for Master's thesis on, 'Large Deformation Finite Element for Earthquake Induced Landslides in Sensitive Clay Slopes', Supervisor: Professor Dr. Bipul Hawlader.
- Research for Undergraduate thesis on, 'One-Dimensional Earthquake Ground Response Analysis at Different Locations of Bangladesh', Supervisor: Professor Dr. Md. Jahangir Alam.
- Conducted PS Logging (Down hole seismic) Tests, Cone Penetration Tests and Microtremor Measurements on several locations as a part of research and consultancy work of BUET-JIDPUS and BRTC, Supervisor: Professor Dr. Tahmeed Malik Al-Hussaini.
- Surveyed on a team for 'Pre-feasibility studies of constructing grade separated intersections in Mirpur Road, Dhaka, Bangladesh', conducted by BUET Team of Consultants.

- **Field/Project Experiences**

- Bridge Foundation in Chittagong Hill Tracts under Roads and Highways Department, Bangladesh. (*Priority National Level Project*)
- Extensive Geotechnical Design for Sand Compaction Piles inserted soft organic clayey ground to facilitate the movement of high speed rails over the Akhaura-Laksham section, Bangladesh (*Priority National Level Project*)
- Design of Gabion Wall of Several Hill Slope Protection in Ramu Cantonment, Cox's Bazar
- Geotechnical Assessment of Balukhali-Gundum Road Construction Project, Cox's Bazar
- Extensive Soil Investigation works for dredger bases as a part of consultancy work for BIWTA and CATS-MIST
- Various commercial and government soil investigation reporting works as a part of consultancy work for CATS-MIST
- Worked on a Project for foundation design of a six storied residential building at Mirpur, Dhaka, Bangladesh. [March 2013-April 2013]
- Worked as a part time project manager of an eight storied residential building in Uttara, Dhaka, Bangladesh and a six storied residential building in Mirpur DOHS, Dhaka, Bangladesh [during undergraduate studies]
- Undergraduate course projects on 'Pile Foundations', 'Floor Finishes', 'Shallow Foundation Designs', ' Cost estimation of a three storied bank building', 'Six Storied Building Design', 'Deep Foundation Designs', 'Pushover Analysis' followed with subsequent presentations.

### **Academic Awards/Scholarships**

- Best Faculty Award for Research from Military Institute of Science and Technology for the academic year 2017.
- Faculty of Engineering and Applied Science Dean's Award of Excellence for a research based M. Eng. Program (convocation award, Spring 2017)
- Fellowship award from the School of graduate studies for outstanding academic achievement throughout the M Eng. program (convocation award, Spring 2017)
- Hira and Kamal Ahuja International Graduate Fellowship for 2016/2017 for Master of Engineering in Memorial University of Newfoundland, Canada (for academic excellence and volunteering works).
- CGS Local Chapter (Newfoundland and Labrador section) Student Travel Award 2016 for attending the GeoVancouver 2016 conference.

- Supervisor's Grant as Intern of *Mitacs Inc.*, and Oil and Gas Scholarships, Memorial University.
- Bangladesh Sweden Travel Trust Fund 2015 for Master in Engineering in Memorial University of Newfoundland, Canada.
- School of Graduate Studies (SGS) Baseline Scholarship for Master in Engineering in Memorial University of Newfoundland, Canada.
- Semester Scholarships and Dean's List Scholarships during undergraduate studies in BUET.
- Educational Board Scholarships for Higher Secondary and Secondary School Certificate Examinations.

### **Trainings & Workshops**

- Completed training course on Design of Tunneling on Soft Grounds organized by Dr Manoj Verma (April 2019)
- Completed training course on Professional Skills Development Program (PSDP) organized by CDEL, MUN (Winter semester 2015)
- Completed training course on Teaching Union Basics (TUB), on behalf of TAUMUN, organized by Public Service Alliance of Canada (PSAC) (Winter semester, 2015).
- Completed training course on Earthquake Engineering at Institute of Engineers Bangladesh (IEB) conducted by Sukomal Modak, Ph.D. Structural Engg Software Developer (R&D) at Computers and Structures, Inc.(CSI), Berkeley, California 94704, USA. (August 2013)
- Completed training course on Faculty Development Program, Centre for Excellence in Stamford University Bangladesh (August, 2013)

### **Extra-Curricular/ Volunteering Activity**

- Volunteering works for Bangladesh Student Association (BSA-MUN), Muslim Students Association (MSA-MUN), Treasurer of Engineering Graduate Student's Society of MUN (EGSS), Graduate Student Representative in Canadian Society of Civil Engineers (CSCE), ISA (International Student Association) (From September 2014 to December 2016)

### **Extracurricular Activity Awards**

- Attained the Bronze, Silver and Gold Level Award by the Volunteer Incentive Program for contributions to community and campus life through volunteering (2016)
- Attained "The Bronze Standard" in the International Award for Young People on behalf of The International Award Association, founded by HRH the Duke of Edinburgh KGKT (2011).
- Won the National Essay Writing competition on topic titled '*Bangladesh*' during Secondary School (2003).

### **Professional Membership**

- Student Member of Canadian Society for Civil Engineering (CSCE), Canadian Geotechnical Society (CGS) and Society of Petroleum Engineers (SPE)
- Member of Institute of Engineers, Bangladesh (IEB), Bangladesh Geotechnical Society.