# ISHRAQ FARUK

# **ACADEMIC QUALIFICATIONS**

# The University of Texas at Arlington (UTA)

Master of Science (MS) in Civil Engineering (August, 2021 – Present)

Major: Geotechnical Engineering

## Bangladesh University of Engineering and Technology (BUET)

Bachelor of Science (BS) in Civil Engineering (July, 2014 - October, 2018)

#### PROFESSIONAL EXPERIENCE

1. Graduate Research Assistant (September, 2021 – Present)

## SWIS (Solid Waste Institute for Sustainability) Lab

<u>Key responsibilities</u>: Currently involved in different projects aiming to improve ground quality, pavement mix designs and energy generation using different types of waste materials with a view to reducing solid waste and converting the wastes into resources.

2. Project Engineer (March, 2021 – June, 2021)

#### **Module Architects**

<u>Key responsibilities</u>: Designing and estimating structures in various projects of Border Guard Bangladesh (BGB). Other responsibilities include preparing BOQ and site work management.

3. Executive – Technical Services (November, 2020 – January, 2021)

## Asian Paints Bangladesh Limited

<u>Key responsibilities</u>: Ensuring the sale of waterproofing and construction materials. Frequent site visits and creating awareness for proper waterproofing.

4. Quantity Surveyor & BIM Engineer (February, 2019 – June, 2020)

#### Hankuk Engineering Consultants

Representative of Dhaka Water Supply and Sewage Authority for Dasherkandi Sewage Treatment Plant

<u>Key responsibilities</u>: Developing 3D Building Information Models (BIM) and review architectural and structural drawings of various facilities of the sewage treatment plant project.

#### TECHNICAL SKILLS

**Programming** C++, MATLAB, Python

Software ArcGIS, Autodesk Revit, Autodesk AutoCAD, Autodesk Civil 3D, PLAXIS 2D,

SewerGEMS, ETABS, SAP2000, STAAD.Pro

#### RESEARCH EXPERIENCE

 Undergraduate thesis topic "Effects on Water Quality of Buriganga and Dhaleshwari Rivers Due to Relocation of Tannery Industries from Hazaribagh to Savar" (Rodoshi Ahmed, Sadia Marjia Ferdous, Muhtashim Rafiq Chowdhury, Ishraq Faruk) under the supervision of Dr. Rowshan Mamtaz.

#### **CONFERENCE PROCEEDINGS**

- 1. Ahmed R., Chowdhury M.R., Faruk I., Ferdous S.M.: Is the CETP at Savar polluting the Dhaleshwari River?, 7th International Conference on Water and Flood Management, 2019
- 2. Ahmed R., Chowdhury M.R., Faruk I., Ferdous S.M.: Impacts of relocation of tannery industries on the river system of Dhaka, 5th International Conference on Civil Engineering for Sustainable Development, 2020

#### **PROJECTS**

### Design of Water Supply, Sanitation and Sewerage Systems

Undergraduate Project Work (January, 2018 - October, 2018)

- Completed as part of the Environmental Engineering Major requirement
- Designed the layout of an industrial village
- Calculated water demand and wastewater generation quantities
- Performed well design calculations
- Calculated hourly water demand per day
- Designed ring loop water supply system
- Designed wastewater discharge network
- Submitted all network design drawings in AutoCAD files

## **EXTRACURRICULAR & VOLUNTEERING EXPERIENCES**

- Organizer, Eccentric CE Festival 2018
- Poster presentation on The Resilience of Dome Structures
- Volunteer, 1st CE Summit, BUET 2016
- Volunteer, Sweden-Bangladesh Nobel Memorial quiz in 2015
- Member, Scintilla Science Club, St. Joseph Higher Secondary School