# Rayhan Rashed

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## Research Interests

My research interest lies at the intersection of sustainability and design, use, and creation of technologies for communities at the margins. My broader interest encompasses effective civic technology & Internet, ICTD, and social computing.

## **EDUCATION**

# Bangladesh University of Engineering and Technology

March 16 - February 21

Bachelors in Computer Science and Engineering CGPA: 3.94/4, Department Rank: 2/120

## Notre Dame College, Dhaka

July 13 - December 15

Higher Secondary Certificate

Aggregate: 85%, College Rank: 1/2500

#### APPOINTMENTS

## Bangladesh University of Engineering and Technology

September 21 - Present

Lecturer, Department of Computer Science

#### **Brac University**

March 21 - August 2021

Lecturer, Department of Computer Science

#### Publications

- [1] S M Taiabul Haque, **Rayhan Rashed**, Mehrab Bin Morshed, Naeemul Hassan, and Syed Ishtiaque Ahmed. "Exploring the Tensions between the Owners and the Driversof Uber Cars in Urban Bangladesh". In: *ACM Conference on Computer-Supported Cooperative Work and Social Computing*. **CSCW** (2021).
- [2] Rayhan Rashed, Aminul Hoque, Sriram Chellappan, and A.B.M. Alim-Al Islam. "Dakter Bari: Introducing Technological Intermediary to Ensure Healthcare Services to Extremely Impoverished People". In: ACM Conference on Computer-Supported Cooperative Work and Social Computing, CSCW (2021).
- [3] Rayhan Rashed, Mohammad Rashidujjaman Rifat, and Syed Ishtiaque Ahmed. "Pandemic, Repair, and Resilience: Coping with Technology Breakdown during COVID-19 in Bangladesh". In: *ACM Conference on Computing and Sustainable Societies COMPASS* (2021).

## Research Experience

## Third Space Group, University of Toronto

January 19 – Present

Research Assistant under Prof. Syed Ishtiaque Ahmed Ontario, Canada

- Leading a project to understand the infrastructural breakdown of informal repair and recycling practices in Bangladesh due to COVID-19 and understand the communities' resilience to withstand the situation. Recruited participants, conducted semi-structured interviews, and analyzed the data using appropriate qualitative coding methods. Part of this work is accepted at **COMPASS 2021.** [3]
- Contributed to a project examining the local adoption of Sharing Economy ventures (e.g., Uber) in the Global South highlighting the tensions and opportunities shaped by the involvement of a new group of stakeholders—private car owners—who make money from Uber without driving their cars. Responsible for designing the questionnaire, recruiting and interviewing participants, and transcribing the data. The paper is accepted at CSCW 2021. [1]

Computing Lab, Bangladesh University of Engineering and Technology September 18 – Present Undergraduate Researcher with Prof. A.B.M. Alim Al Islam

Dhaka, Bangladesh

- Led the ideation, design, development, and deployment of a healthcare information system for resource-constrained homeless communities in urban Bangladesh that leverage technology and information intermediaries within society. Conducted semi-structured interviews with 70 homeless people and 71 intermediaries to assess the contextualized needs and inter-community relationships. Performed statistical analysis on system usage data to examine the efficacy of the approach. The initial paper resulting from this project has been accepted at CSCW 2021.[2]
- Collaborated with ICT Division, Government of Bangladesh to understand adoption, availability, and predict the future demand of the Internet in large families in rural Bangladesh. Contributed to the survey design and collection of 5000+ responses from field surveys conducted in rural areas allover the country. Leading the quantitative analysis of survey data. Draft in preparation for **CHI Student Research Competition**.

## AWARDS & ACHIEVEMENTS

- Cheman Ara Scholar 2019: Academic Honor by Computer Science Department, BUET.
- University Award for Academic Excellence (2019, 2018, 2017, 2016)
- Champion, National Science Olympiad 2015: by Bangladesh Academy of Sciences
- Award of Merit 2015: Highest Academic Honor by Notre Dame College, Dhaka, Bangladesh
- Ninth Place 2015: Among 12,000+ candidates in BUET Entrance Exam [top 0.008%]
- Earth Champion Fellow 2015: Awarded by Bangladesh Youth Environmental Initiative

## ACADEMIC SERVICE

#### Invited Review

- ACM Conference on Human Factors in Computing Systems (CHI) 2021, 2022
- ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW) 2021

## Student Volunteer

- CSCW 2020
- **UIST** 2020, 2021

# TEACHING & LEADERSHIP EXPERIENCE

Lead Instructor Summer 2022

CSE 101: Introduction to Structured Programming (120 Students)

Bangladesh University of Engineering and Technology [BUET]

Lead Instructor Spring & Fall 2021

CSE 221: Algorithms (111 Students)

Brac University

Teaching Assistant. Course: Design Thinking in HCI

June 19 - August 19

Instructor: Prof. Syed Ishtiaque Ahmed

Workshop series at BUET, Dhaka, Bangladesh

Member, Knowledge, Policy, and Sustainability Team

January 16 - June 19

Bangladesh Youth Environmental Initiative [BYEI]

# SKILLS

User Research: Semi-structured interviews, Surveys, Field studies, Observation, Contextual inquiry.

**Data Analysis**: Qualitative data analysis (e.g., coding, thematic analysis, affinity diagraming), Quantitative and Statistical analysis (e.g., R, Python), Prototyping and development (e.g., Angular, D3.js).

Languages: Python, R, Java, C/C++, SQL (Postgres), JavaScript, HTML/CSS