

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 2016 – 2021
Bachelors in Computer Science and Engineering
CGPA: **3.94/4**, Department Rank: **2/120**

Notre Dame College, Dhaka 2013 – 2015
Higher Secondary Certificate
Aggregate: **85%**, College Rank: **1/2500**

APPOINTMENT

Bangladesh University of Engineering and Technology 2021 – Present
Lecturer, Department of Computer Science and Engineering

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 Drivers of Uber Cars in Urban Bangladesh”. In: *ACM Conference on Computer-Supported Cooperative Work and Social Computing, CSCW (2021)*.
- [2] **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)*.
- [3] **Rayhan Rashed***, Md. Aminur Rahman*, 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)*.

RESEARCH EXPERIENCE

Third Space Group, University of Toronto 2019 – Present
Research Assistant with [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**.
- Contributed to a project studying the adoption of Sharing Economy services like Uber in the Global South, focusing on the involvement of private car owners who earn from Uber without driving. My responsibilities included questionnaire design, participant recruitment, interviews, and data transcription. The paper has been accepted at **CSCW 2021**.

NextGen Computing Lab, Bangladesh University of Engineering and Technology 2018 – Present

Research Associate with [Prof. A.B.M. Alim Al Islam](#)

Dhaka, Bangladesh

- Led the creation and deployment of a healthcare info system for urban homeless communities in Bangladesh, utilizing technology and local intermediaries. I conducted interviews with 70 homeless individuals and 71 intermediaries to understand their needs and relationships. Statistical analysis of system data was done to gauge its effectiveness. The project's initial paper was accepted at **CSCW 2021**.
- 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 all over the country. Leading the quantitative analysis of survey data. Draft in preparation for **PACM-HCI**.

AWARDS & ACHIEVEMENTS

- ❖ **Cheman Ara Scholar:** Academic Honor by Department of Computer Science, BUET.
- ❖ **University Scholarship for Academic Excellence and Deans' List (2016 – 2021),** BUET
- ❖ **Champion, National Science Olympiad, Bangladesh:** Arranged by Bangladesh Academy of Sciences
- ❖ **Award of Merit:** Highest Academic Honor by Notre Dame College, Dhaka, Bangladesh
- ❖ **Ninth Place:** 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

- ❖ **CHI** 2021, 2022, 2024
- ❖ **CSCW** 2021
- ❖ **ACM JCSS/COMPASS** 2023, 2024

Student Volunteer

- ❖ **UIST** 2020, 2021
- ❖ **CSCW** 2020
- ❖ **COMPASS** 2021, 2023

TEACHING & LEADERSHIP EXPERIENCE

Lead Instructor

Summer 2022

CSE 101: Introduction to Structured Programming (120 Students)

Bangladesh University of Engineering and Technology [BUET]

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 \[BYEI\]](#)

CONSULTANCY

- ❖ Vulnerability Assessment and Penetration Testing of the [Sonali eSheba](#). [# of users \approx 1 Million]
- ❖ Security and Functionality Assessment of [Central College Admission System](#), Ministry of Education, Bangladesh.

SKILLS

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

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

Security & Systems: Operating System ([xv6](#)), Reverse engineering (Ghidra, Hopper), Jailbreaking/Rooting, SSH, Penetration testing (SQLi, XSS, RFI, CSRF, DB vulnerability), PCI DSS, API testing, Metasploit framework

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