

Rayhan Rashed

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RESEARCH INTERESTS

My broader interest lie at the intersection of social computing, participatory & responsible AI, civic technology, and policy. I also explore how to design, use, and build technologies for communities at the margins.

EDUCATION

Bangladesh University of Engineering and Technology 2016 – 2021

BS in CSE, GPA: **3.94/4**, Rank: **2/142**

Notre Dame College, Dhaka 2013 – 2015

Higher Secondary, Aggregate: **85%**, Rank: **1/2500**

APPOINTMENT

Bangladesh University of Engineering and Technology 2021 – Present



Lecturer, Department of Computer Science and Engineering

Saudi Authority for Data and Artificial Intelligence (SDAIA) 2023 – Present

Research Engineer, AI in Education Division

PUBLICATIONS

C=Conference, W=Workshop/Short Paper

[C.3] **Pandemic, Repair, Resilience: Coping with Technology Breakdown during COVID-19**  

R. Rashed, M.R. Rifat, S.I. Ahmed

ACM SIGCAS/SIGCHI Conference on Computing and Sustainable Societies [COMPASS'21]

[C.2] **DakterBari: Introducing Intermediary to Ensure Healthcare to Extremely Impoverished**



R. Rashed*, M.A. Rahman*, S.A. Purabi, N. Ulfat, S. Chellappan, A.B.M.A. Islam

ACM SIGCHI Conference on Computer-Supported Cooperative Work and Social Computing [CSCW'21]

[C.1] **Exploring the Tensions between the Owners and Uber Drivers in Urban Bangladesh**  


S. Haque, **R. Rashed**, M.B. Morshed, N. Hassan, S.I. Ahmed

ACM SIGCHI Conference on Computer-Supported Cooperative Work and Social Computing [CSCW'21]

[W.2] **Healthcare Record Management and Unnoticeable Vulnerabilities for Refugees** 

F.T. Jaigirdar, C. Rudolph, **R. Rashed**, N. Uddin, C. Bain, A.B.M.A. Islam

ACM SIGCAS/SIGCHI Conference on Computing and Sustainable Societies [COMPASS'22]

[W.1] **A System-level Analysis Between Head Movements and Corresponding Traits** 

S.A. Purabi, **R. Rashed**, M.M. Islam, M.N. Uddin, M. Naznin, and A.B.M.A. Islam

International Conference on Networking, Systems and Security (NSysS) [NSysS'19]

RESEARCH EXPERIENCE

Third Space Group, University of Toronto 2020 – 2022

Research Assistant with *Prof. Ishtiaque Ahmed*

- Led a project studying the informal repair, recycling, breakdown ecosystem in Bangladesh during COVID-19. – Recruited participants, conducted semi-structured interviews, and analyzed the data using appropriate qualitative coding methods. Part of this work is accepted at **COMPASS 2021**[C.3]
- Led another project studying the adoption of Sharing Economy services (e.g., Uber) in the Global South. – My responsibilities included questionnaire design, participant recruitment, interviews, data analysis. The paper has been accepted at **CSCW 2021**[C.1]

NeC Lab, Bangladesh University of Engineering and Technology 2019 – 2023

Research Assistant with *Prof. A.B.M. Alim Al Islam*

- Developed and deployed a healthcare info system for urban homeless communities, utilizing tech intermediaries.

– Conducted statistical analysis of system usage data, interviewed 70 homeless individuals, 71 infomeidiaries. The project’s initial paper was accepted at **CSCW 2021**[C.2]

• Collaborated with [ICT Division, Government of Bangladesh](#) to study the digital divide, adoption & availability of the Internet in rural Bangladesh and the impact of migration.

– Designed and collected 5000+ responses from field surveys conducted in rural areas all over the country. Leading the quantitative analysis of survey data. Draft in preparation for **ACM IMC**.

AWARDS & ACHIEVEMENTS

❖ **Chemana 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 [♣ = Outstanding Review Recognition]

❖ **CHI** 2021, 2022, 2024[♣♣]

❖ **CSCW** 2021[♣], 2024

❖ **JCSS/COMPASS** 2023, 2024

Student Volunteer

❖ **UIST** 2020, 2021

❖ **CSCW** 2020

❖ **COMPASS** 2021, 2023

TEACHING & LEADERSHIP EXPERIENCE

Lead Instructor

2021 -2023

Computer Networks [CSE 321/322], Operating Systems [CSE 313/314], BUET

Co-Organizer Workshop: Design Thinking in HCI

June - August 2019

Instructor:[Prof. Syed Ishtiaque Ahmed](#), Workshop series at CSE, BUET

Member, Knowledge, Policy, and Sustainability Team

2016 - 2019

[Bangladesh Youth Environmental Initiative \[BYEI\]](#)

CONSULTANCY

❖ Vulnerability Assessment & Penetration Testing of [Sonali eSheba](#) [iOS/Android/Web. Monthly users≈1 Million]

❖ Security and Functionality Assessment of [Central College Admission System](#), Ministry of Education, Bangladesh.

❖ Backend System Development, Central Election, Institution of Engineers, Bangladesh. [Voters ≈ 210K]

SKILLS

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

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

Security & Systems: Operating System (**xv6**), Reverse engineering (Ghidra, Hopper), Jailbreaking/Rooting, SSH, Penetration testing (SQLi, XSS, RFI, CSRF, DB vulnerability), Postman, GraphQL, Metasploit framework

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

Libraries & Tools: PyTorch, TensorFlow, Scikit-learn, Git, Node.js