Curriculum Vitae

Rudaiba Adnin

Contact Information

Website: rudaibaadnin.github.io Scholar Profile: Google Scholar

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Research Interests

My research interest is at the intersection of Computer-Supported Cooperative Work (CSCW), Human-Computer Interaction (HCI), and Accessible Computing. Currently, I am interested in understanding the accessibility of recent GenAI-powered tools (e.g. ChatGPT, Be My AI) from the perspective of blind and low-vision individuals.

Education

Northeastern University
PhD in Computer Science

Boston, MA, USA Fall 2023 - Present

Bangladesh University of Engineering and Technology (BUET)

Bachelor of Science in Computer Science and Engineering

Dhaka, Bangladesh Feb 2016 - Feb 2021

Holy Cross College
Higher Secondary School Certificate in Science

Dhaka, Bangladesh July 2013 - August 2015

Experiences

Technology, Equity, and Accessibility Lab (TEA Lab)

Research Assistant

Boston, MA, USA March 2023 - Present

Here, I am engaged in research projects under the supervision of Prof. Maitraye Das

Next-Generation Computing Lab

Research Collaborator

BUET, Dhaka, Bangladesh August 2020 - August 2023

Here, I was engaged in several research projects under the supervision of Prof. A. B. M.
 Alim Al Islam and Prof. Sriram Chellappan.

Therap BD Ltd.

Database Engineer

Dhaka, Bangladesh March 2021 - July 2023

This software service serves people with disabilities in the USA and Canada. Here, I perform the following responsibilities.

- **Custom Reports**: I wrote SQL queries to create reports of <u>health data</u> and tuned them to improve performance by analyzing user requirements.
- Patching: I patched single instances and container Oracle databases, and RAC systems with up-todate patches.
- R&D: I performed extensive R&D on new versions of Goldengate, SQLTxplain, and DBSAT.
- o Scripting: I wrote scripts to automate DBA work by using Shell Script, Python, and Java.

• **Training**: I trained junior engineers by explaining different modules of the software and illustrating the database.

Other Experiences

- [Presenter [videos]] Presented in ASSETS 2024, ACM COMPASS 2023, CSCW 2022, MobiQuitous 2022, ACM COMPASS 2022, HCII 2022, ACM NSysS 2022, and ACM NSysS 2021
- [Reviewer] Reviewed for CHI 2025, CHI 2024, ACM COMPASS 2024, ACM COMPASS 2023, CSCW 2023, and CSCW 2022
- [Student Volunteer] Served as a student volunteer for ASSETS 2024 and ACM COMPASS 2023
- [Member] ACM Student Member, Active Member of BWCSE
- [Mentor] Mentored six undergraduate students in research projects
- [Tutor] Tutored 9th to 12th grades students for five years

Honors and Awards

- [2023] Khoury Distinguished Fellowship
- [2022] Runner-up Paper Award at ACM NSysS 2022!
- [2022] Registration Waiver Grant to attend ACM COMPASS 2022
- [2021] Best Paper Award at ACM NSysS 2021!
- [2020] University Merit Scholarship (Level 4)
- [2016] University Admission Test Merit Scholarship
- [2015] National Higher Secondary School Merit Scholarship by the Government of Bangladesh
- [2013] National Secondary School Merit Scholarship by the Government of Bangladesh
- [2007] Primary School Merit Scholarship by the Government of Bangladesh

Publications

Use of GenAl

- Examining Student and Teacher Perspectives on Undisclosed Use of Generative AI in Academic Work: Accepted at CHI 2025 (Acceptance rate: 25.1%), [pdf]
 - Rudaiba Adnin, Atharva Pandkar, Bingsheng Yao, Dakuo Wang, Maitraye Das
 - Artifact: Questionnaire, Interview Guide; Method: Mixed-method; Data: Survey, Interviews; Participant: Students; Analysis: Reflexive thematic analysis
- "I look at it as the king of knowledge": How Blind People Use and Understand Generative AI Tools: Published in ASSETS 2024 (Acceptance rate: 30%), [pdf], [doi]
 Rudaiba Adnin, Maitraye Das
 - Artifact: Questionnaire; Method: Interview study; Data: Interviews; Participant: Blind individuals; Analysis: Reflexive thematic analysis

Underrepresented Groups

- Focusing on the Unfocused: Understanding the Impact of Online Interactions with Small-Scale Non-Profit Organizations Working for Benefit of Street Children in Bangladesh: Published in ACM COMPASS 2023, [pdf], [doi]
 - Rudaiba Adnin, Ishita Haque, Sadia Afroz, Alvi Md. Ishmam, Sriram Chellappan, A.B.M. Alim Al Islam
 - Artifact: Questionnaire; Method: Interview study; Data: Interviews; Participant: NPOs and Donors; Analysis: Thematic coding
- Investigating Human Factors in Willingness to Donate to the Small-scale Non-profit Organizations in Bangladesh: Published in the CSCW 2022 Posters track, [pdf], [doi]
 - Rudaiba Adnin, Ishita Haque, Sadia Afroz, Alvi Md. Ishmam, A.B.M. Alim Al Islam
 - Artifact: Questionnaire; Method: Survey study; Data: Survey; Participant: People of all classes; Analysis: Statistical analysis; Tech: Pandas, Scikit-learn, Plotly
- A Hiring Story: Experiences of Employers in Hiring CS Graduates in Software Startups: Published in the CSCW 2022 Posters track, [pdf], [doi]
 - Rudaiba Adnin, Sadia Afroz, Muhtasim Ulfat, Anindya Iqbal
 - Artifact: Questionnaire; Method: Interview study; Data: Interviews; Participant: Employers of software startups; Analysis: Thematic coding

Social Media

 InnerEye: A Tale on Images Filtered using Instagram Filters - How Do We Interact with Them And How Can We Automatically Identify The Extent of Filtering?: Accepted to Mobiquitous 2022, [pdf], [doi]

Gazi Abdur Rakib, Rudaiba Adnin, Shekh Ahammed Adnan Bashir, Chashi Mahiul Islam, Abir Mohammad Turza, A.B.M. Alim Al Islam

Artifact: Scenario, Questionnaire, Web tool; Method: Survey, User evaluation; Data: Survey, Interaction trace; Participant: Social media users; Analysis: Statistical analysis; Tech: Tensorflow, Pandas, Scikit-learn, Flask, Javascript, SQLite, Inkscape, Matlab

Artificial Intelligence

• EmoBot: Artificial emotion generation through an emotional chatbot during general-purpose conversations: Published in Cognitive Systems Journal 2023, [pdf], [doi]

Ehtesham-ul-koushik, Jacob'D Rozario, Rudaiba Adnin, Farhan Tanvir Utshaw, Fabiha Tasneem, A.B.M. Alim Al Islam

Artifact: ChatBOT, Questionnaire; Method: Implementation, User evaluation; Data: Survey, Interaction trace; Participant: People of all ages; Analysis: Statistical analysis; Tech: Pandas, Scikit-learn, Python

Online Abuse & Privacy

'A Tale on Abuse and Its Detection over Online Platforms, Especially over Emails': From the Context of Bangladesh: Published in ACM NSysS 2021 (Best Paper Award, Acceptance rate: 16.67%), [pdf], [doi]

Ishita Haque, Rudaiba Adnin, Sadia Afroz, Faria Huq, Sazan Mahbub, A.B.M. Alim Al Islam Artifact: Questionnaire; Method: Mixed-method study; Data: Interviews, survey; Participant: People who use social media; Analysis: Thematic coding, Statistical analysis; Tech: Pandas, Scikit-learn, Plotly

 Citadel: An Automated Abuse Detection System to Detect and Prevent Abusive Behaviors over Emails: Published in ACM NSysS 2022, (Runner-up Paper Award, Acceptance rate: 27%) [pdf], [doil

Ishita Haque, Rudaiba Adnin, Sadia Afroz, Faria Huq, Sazan Mahbub, Sami Azam, A.B.M. Alim Al Islam

Artifact: Chrome extension, Questionnaire; Method: 3-day Field study; Data: Interaction trace, Survey; Participant: Frequent email users; Analysis: Statistical analysis; Tech: Tensorflow, Pandas, Django, Javascript, SQLite, Inkscape, Plotly.

Online Learning

 An Educational Ecosystem Based on Blockchain: Published in the ACM COMPASS 2023, Rudaiba Adnin, Rezwana Reaz

Artifact: Flowchart

• Note: Learn Online: High School Students' Adoption of Online Learning in Bangladesh during COVID-19 Pandemic: Published in the ACM COMPASS 2022, [pdf], [doi]

Rudaiba Adnin, Sadia Afroz, Sadia Sharmin

Artifact: Questionnaire; Method: Interview study; Data: Interviews; Participant: High school students; Analysis: Thematic coding

• Students' Adoption of Online Platforms for Learning Purposes in Bangladesh: Published in HCI International 2022, [pdf], [doi]

Rudaiba Adnin, Sadia Afroz, Montaset Majid Taseen, Sadia Sharmin

Artifact: Questionnaire; Method: Mixed-method study; Data: Interviews, survey; Participant: University students; Analysis: Thematic coding, Statistical analysis; Tech: Pandas, Scikit-learn, Plotly

Disease Outbreaks

• Revealing Influences of Socioeconomic Factors over Disease Outbreaks: Published in the ACM COM-PASS 2022 (Acceptance rate: 37%), [pdf], [doi]

S Mahmudul Hasan, Alabi Mahzabin, Rudaiba Adnin, Ishrat Jahan Eliza, Ishika Tarin, Sadia Afroz, A.B.M. Alim Al Islam

Artifact: Scraped Data; Correlation Analysis: Pearson and Spearman correlation; Tech: Pandas, Numpy, Scikit-learn, NetworkX

Selected Academic Projects

Kanbas: [github]

Users: Students, Teachers; Tech: React, Node.js, MongoDB

Description: I implemented an online learning portal where teachers can add learning modules, assignments, and quizzes for students.

• eCommerce MarketPlace: [documentation]

Users: Vendors, Customers; Documentation: Uml diagram, ERD; Tech: Laravel, MySQL, Javascript Description: I implemented an Ecommerce Website to buy and sell products. Here, vendors could add new products to sell and customers could buy them.

Library Management System: [github]

Users: Admin, Library members; Tech: Oracle, JavaFX

Description: I implemented a Library Management system where the library members could borrow books from the library. The admin could manage the database of books and library members.

• Two Mode Car: Obstacle Avoiding Automated and Remote Control Car: [video]

Tech: Atmega32, Sonar sensor, DC motor

Description: I implemented a two-mode car with remote controlling functions and automation.

The car would avoid obstacles while moving during automation mode.

Skills Summary

- o Research Method: Interview, Survey, Mixed-method, Prototyping, Data Scraping
- o Analysis: Reflexive thematic Coding, Significance tests, Correlation, Regression
- o Languages: Python, PHP, C++, JavaScript, SQL, Bash, JAVA
- o Frameworks: React, Django, Flask, Laravel, Pandas, NLTK, Numpy, Scikit-Learn, Plotly, Matlab
- o Tools: Git, Docker, Oracle, MySQL, SQLite, Inkscape, LLM-APIs
- o Platforms: Linux, Windows
- o Other Skills: Leadership, Communication, Detail-oriented, Time Management