Tamanna Motahar, PhD

Assistant Professor · University of Louisiana at Lafayette

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Research Statement

My interdisciplinary research interests lie broadly at the intersection of **Human Computer Interaction (HCI)**, **Ubiquitous Computing**, and **Accessibility**. Through a user-centric approach, my research seeks to understand how ubiquitous and assistive technologies can be designed to better support individuals with motor disabilities, ensuring accessibility and usability tailored to their needs.

Research Keywords: Human Computer Interaction, Ubiquitous Computing, Accessibility, Digital Health

Appointment

University of Louisiana at Lafayette — *Lafayette, LA, USA*
School of Computing and Informatics — *August, 2025*
- Assistant Professor -Tenure track

University of Washington — *Seattle, WA, USA*
Paul G. Allen School of Computer Science and Engineering — *August, 2024 - 2025*
- Postdoctoral Scholar
- Center for Research and Education on Accessible Technology and Experiences (CREATE)

Education

University of Utah — *Salt Lake City, Utah, USA*
PhD in Computing — *2020 - 2024*
- Focus Area: Human Centered Computing
- Dissertation Title: Expanding Personal Informatics for People with Severe Motor Disailities

University of Alberta — *Edmonton, AB, Canada*
M. Eng. in Electrical and Computer Engineering — *2015*

North South University — *Dhaka, Bangladesh*
M. Sc. in Electronics and Telecommunication Engineering — *2010*

American International University Bangladesh — *Dhaka, Bangladesh*
B.Sc. In Computer Engineering — *2006*
- Vice Chancellor's Gold Medal
- *Summa Cum Laude*

Grants

2024	**Allen School Postdoctoral Research Award (PI)**, University of Washington	*$10,000*
2024	**Research Travel Grant for *ASSETS'24***, DO-IT: AccessComputing, University of Washington	*$2,000*
2024	**Research Travel Grant for *Ubicomp'24***, Personal Data and Empowerment Lab (PeDEL), Kahlert School of Computing, University of Utah	*$2,000*
2023	**Google Inclusion Research Award**, Prepared grant document with PI Prof. Jason Wiese	*$60,000*
2022	**Gary Marsden Travel Award for *CHI2022***, ACM SIGCHI	*$1800*
2021	**Rising Star Grant**, ACM-W Asia Pacific	*$500*
2019	**CICS Fellowship Award**, (top 1% of new graduate students), Umass Amherst	*$5000*
2018	**Participant Grant**, ACM SIGCHI Across Borders Initiatives, Swansea, UK	*$3000*
2018	**Junior Faculty Travel Grant**, ACM Ubicomp/ISWC'18, Singapore	*$1000*
2018	**Research Travel Grant for *CHI'18* (Montreal, Canada)**, North South University, Bangladesh	*$3000*
2018	**Research Travel Grant for *MobileHCI'18* (Barcelona, Spain)**, North South University, Bangladesh	*$1000*
2017	**Research Travel Grant for *BIBE'17* (Washington DC, USA)**, North South University, Bangladesh	*$2000*
2018	**Travel Grant**, ACM SIGCHI Summer School, HCI Research and UX Design, IIT Bombay, India	*$800*

Awards, Fellowships and Recognition

2025-	**Patrick Clark Endowed Professorship**, *University of Louisiana at Lafayette*
2025	**Best Paper Honorable Mention Award**, *ACM CHI 2025*
2024 - 2025	**Advanced Rehabilitation Research and Training (ARRT) Postdoctoral Fellowship**, University of Washington CREATE | Funding: NIDILRR
2025	**Recognition for Outstanding Review**, *CHI 2025*
2024	**Best Paper Honorable Mention Award**, *DIS 2024*
2024	**Recognition for Outstanding Review**, *CHI 2024*
2023	**Nominee for Google PhD Fellowship**, University of Utah
2023	**Nominee for Microsoft Research PhD Fellowship**, University of Utah
2023	**Graduate Fellowship Nominee**, Kahlert School of Computing, University of Utah
2022-2024	**Cultural Competence in Computing (3C) Fellowship**, Duke University
2021	**Tapia Scholarship**, ACM Richard Tapia Celebration of Diversity in Computing
2021	**Rising Star**, ACM-W Asia Pacific
2019	**Grace Hopper Scholar**, Grace Hopper Conference, Orlando, Florida
2019	**Runner Up**, Facebook Global Literacy and Accessibility Research Proposal
2018	**Best Poster Award**, HCI across Borders, ACM CHI Conference'18, Montreal, Canada
2017	**Champion (mentor)**, *Techbeez: Women in ICT*, National Tech Idea Generation Competition, Dhaka, Bangladesh
2006	**Vice Chancellor's Gold Medal and *Summa Cum Laude***, 6th convocation, American International University- Bangladesh
2002 - 2006	**Merit Scholarship (100%)**, American International University- Bangladesh

Publications

- *CHI*, *IMWUT*, *DIS* and *ASSETS* are the top publication venues in HCI and Accessibility research domain
- Student mentees are marked with an asterisk (*)

Journal Papers [Peer-Reviewed]

J7. [IMWUT'25] **Tamanna Motahar**, Brandon Rivera-Melo, Ross Imburgia, *Yeon Jae Kim, James Gardner, Jeffrey Rosenbluth, Jason Wiese. Design and Evaluation of a Power Wheelchair-Based Self-tracking System to Prevent Pressure Ulcers. In *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT) 9, 1, Article 220 (March 2025)*

J6 . [IMWUT'24] **Tamanna Motahar**, Jason Wiese. 2024. Investigating Technology Adoption Soon After Sustaining a Spinal Cord Injury. In *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT) 8, 1, Article 14 (March 2024)*

J5. [CSCW'23] Johannah Cohoon, Kazi Sinthia Kabir, **Tamanna Motahar**, Jason Wiese. 2023. Cultivating Altruism Around Computing Resources: Anticipation Work in a Scholarly Community. In *Proceedings of the ACM on Human-Computer Interaction, Volume 7, Issue CSCW2, Article No.: 336, pp 1–22*

J4. [IMWUT'22] **Tamanna Motahar**, Jason Wiese. 2022. A Review of Personal Informatics Research for People with Motor Disabilities. In *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT) 6, 2, Article 66 (July 2022)*

J3. [Springer Nature'22] Nova Ahmed, Lamia Iftekhar, Mahbuba Tasmin, Tamanna Urmi, Silvia Ahmed, **Tamanna Motahar**. "Challenges for women in computing in Bangladesh considering the learning and workplace environment over a period of eight years." Springer Nature Social Sciences 2, no. 10 (2022): 1-24.

J2. [ACM Digital Government'21] Iman Deznabi, **Tamanna Motahar**, Ali Sarvghad, Madalina Fiterau, Narges Mahyar. 2021. Impact of the COVID-19 Pandemic on the Academic Community Results from a survey conducted at University of Massachusetts Amherst. In *ACM Transactions on Digital Government: Research and Practice*, 2(2), 1-12, 2021

J1. [Geology, Ecology, and Landscapes'19] *Nahian Ahmed, Naimul Islam, Ferdous Hasan, **Tamanna Motahar**, Mohammad Sujauddin. 2019. Understanding the political ecology of forced migration and deforestation through a multi-algorithm classification approach: The case of Rohingya displacement in the southeastern border region of Bangladesh. *Geology, Ecology, and Landscapes*, 3, no. 4 (2019): 282-294

Conference Papers [Peer-Reviewed]

P13. [RESPECT'25] Murray, Michael, **Tamanna Motahar**, and Maya Cakmak. "Towards More Accessible Open Source AI Platforms." Proceedings of the 2025 Conference on Research on Equitable and Sustained Participation in Engineering, Computing, and Technology. 2025.

P12. [CHI'25] **Tamanna Motahar**, *Yeon Jae Kim, *Eden Fisher, Jason Wiese (2025). Understanding the Training Experiences of Competitive Skiers with Tetraplegia. In *Proceedings of the ACM Conference on CHI Conference on Human Factors in Computing Systems* ***(CHI)*** ***(Best Paper Honorable Mention Award, Top 5%)***

P11. [ASSETS'24] **Tamanna Motahar**, Sara Nurollahian, YeonJae Kim, Marina Kogan, and Jason Wiese. "Exploring how People with Spinal Cord Injuries Seek Support on Social Media." In The 26th International ACM SIGACCESS Conference on Computers and Accessibility, pp. 1-17. 2024. (Acceptance Rate 29%)

P10. [DIS'24] **Tamanna Motahar**, Noelle Brown, Eliane S. Wiese, Jason Wiese (2024). Toward Building Design Empathy for People with Disabilities Using Social Media Data: A New Approach for Novice Designers. In *Proceedings of the ACM Designing Interactive Systems Conference (DIS).* ***(Best Paper Honorable Mention Award, Top 5%)***

P9. [CHI'22] **Tamanna Motahar**, Isha Ghosh, Jason Wiese (2022). Identifying factors that inhibit self-care behavior among individuals with severe spinal cord injury. In *Proceedings of the ACM Conference on CHI Conference on Human Factors in Computing Systems* ***(CHI)****, pp. 1-16. 2022. (Acceptance Rate 24%)*

P8. [TALE'19] *Mahbuba Tasmin, Nova Ahmed, **Tamanna Motahar**. 2019. Gender Disparity in Computer Science Education in Bangladesh: A Study of Women's Participation in Computer Science. In *Proceedings of the 2019 IEEE International Conference on Engineering, Technology and Education (TALE)*, pp. 1-7. IEEE, 2019

P7. [TENCON'19] *Kimia T. Zaman, *Wordh U. Hasan, Lubaba Bazlul, **Tamanna Motahar**, Nova Ahmed. 2019. Exploring challenges and solution approaches regarding wellbeing of female rohingya community in Bangladesh. In *Proceedings of the IEEE conference on TENCON 2019-2019 IEEE Region 10 Conference (TENCON)*, pp. 361-366. IEEE, 2019

P6. [RO-MAN'19] **Tamanna Motahar**, *Md F.Farden, *Dibya P. Sarkar, *Md A. Islam, Maria E. Cabrera, Maya Cakmak . 2019. SHEBA: A Low-Cost Assistive Robot for Older Adults in the Developing World. In *Proceedings of the 2019 28th IEEE International Conference on Robot and Human Interactive Communication (RO-MAN)*, pp. 1-8. IEEE, 2019

P5. [ICACT'19] *Jafrul I. Sojol, *Md S. Alam, *Nazmul Hossain, **Tamanna Motahar**. 2019. Smart School Bus: Ensuring Safety On The Road For School Going Children. In *Proceedings of the 2019 21st International Conference on Advanced Communication Technology (ICACT)*, pp. 734-739. IEEE, 2019

P4. [ICIEV'19] *Dibya Sarkar, *Md Farden, *Md Islam, Rahat J. Rony, **Tamanna Motahar**. 2019. A Low-cost Healthcare Bot for Elderly People. In *Proceedings of the 2019 Joint 8th International Conference on Informatics, Electronics and Vision (ICIEV) and 2019 3rd International Conference on Imaging, Vision and Pattern Recognition (icIVPR)*, 2019, pp. 18-23

P3. [ICIEV'19] *Mahmudur Rashid, SM A. Ahad, Shahida Siddique,**Tamanna Motahar**. 2019. Smart Warehouse Management System with RFID and Cloud Database. In *Proceedings of the 2019 Joint 8th International Conference on Informatics, Electronics and Vision (ICIEV) and 2019 3rd International Conference on Imaging, Vision and Pattern Recognition (icIVPR)*, 2019, pp. 218-222

P2. [ICACSIS'18] *Mostafa D. Mahdi, *Zahid H. Anik, *Rahbar Ahsan, **Tamanna Motahar**. 2018. EZ parking: smart parking space reservation using internet of thingsy. In *Proceedings of the 2018 International Conference on Advanced Computer Science and Information Systems (ICACSIS)* (pp. 113-118). IEEE, 2018

P1. [BIBE'17] **Tamanna Motahar**, Rummana Rahman, Rafiya Hossain. 2017. A Simulation Study on Light Scattering Effect on Water-borne Bacteriophage Virus Using Mie Analysis. In *Proceedings of the 2017 IEEE 17th International Conference on Bioinformatics and Bioengineering (BIBE)*, pp. 255-259. IEEE, 2017

Extended Abstracts [Peer-Reviewed]

E8. [EduCHI'23] **Tamanna Motahar**, Noelle Brown, Eliane S. Wiese, Jason Wiese. 2023. Building "Design Empathy" for People with Disabilities: an Unsolved Challenge in HCI Education. In *Proceedings of the 5th Annual Symposium on HCI Education (pp. 68-71)*

E7. [PASC'23] **Tamanna Motahar**, Johannah Cohoon, Kazi Sinthia Kabir, Jason Wiese. 2023. Closing the Gap: Aligning Developers' Expectations and Users' Practices in Cloud Computing Infrastructure. *The Platform for Advanced Scientific Computing (PASC)*

E6. [ICTD'22] Nova Ahmed, **Tamanna Motahar**, Silvia Ahmed, Tamanna Urmi, Mahbuba Tasmin, Lamia Iftekhar. "Opportunities for Women in Computing: Perspective of Bangladesh." In *Proceedings of the 2022 International Conference on Information and Communication Technologies and Development*, pp. 1-4. 2022.

E5. [CHI LBW'22] **Tamanna Motahar**, Nova Ahmed. 2022. Exploring Technology Usage of Southeast Asian Elderly Women for Better Mental Health during COVID-19 Pandemic. In *Proceedings of the CHI Conference on Human Factors in Computing Systems Extended Abstracts, pp. 1-7. 2022* ***(Acceptance Rate 36%)***

E4. [CHI LBW'20] **Tamanna Motahar**, Mahmood Jasim, Syed I. Ahmed, Narges Mahyar. 2020. Exploring how international graduate students in the US Seek support. In *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems, (pp. 1-8), 2020* ***(Acceptance Rate 40%)***

E3. [Ubicomp'18] **Tamanna Motahar**, Md F. Farden, Md A. Islam, Rahat J. Rony, and Dibya P. Sarkar. 2018. Mini nurse-bot: A healthcare assistance for elderly people. In *Proceedings of the 2018 ACM International Joint Conference and 2018 International Symposium on Pervasive and Ubiquitous Computing and Wearable Computers*, pp. 170-173. 2018

E2. [Ubicomp'18] *Maliha B. Nur, **Tamanna Motahar**, Sayed I. Masud, Emrul Kaisar. 2018. RICKSHAW BUDDY: A Cost Effective Automated Auto Rickshaw Assistance System. In *Proceedings of the 2018 ACM International Joint Conference and 2018 International Symposium on Pervasive and Ubiquitous Computing and Wearable Computers*, pp. 190-193. 2018

E1. [MobileHCI'18] **Tamanna Motahar**, Taskin Fatema, Rajdeep Das. 2018. Bornomala AR-bengali learning experience using augmented reality. In *Proceedings of the 20th International Conference on Human-Computer Interaction with Mobile Devices and Services Adjunct*, pp. 182-188. 2018

Workshop Papers [Lightly Peer-Reviewed]

W12. [CHI'25] **Tamanna Motahar**, Maya Cakmak. 2025. Up and Beyond: Collaboration and Community Building in Accessibility Research. *CHI'25 Workshop: HCI across Borders, CHI 2025*

W11. [HRI'25] **Tamanna Motahar**, Denby Frank, Vaishnavi Vidyasagar, Maya Cakmak. 2025. Designing a Mobile Device Positioning Robotic Arm for Power Wheelchair Users. *The HRI workshop on Physical Caregiving Robots, HRI 2025*

W10. [ASSETS'23] **Tamanna Motahar**, Noelle Brown, Eliane S. Wiese, Jason Wiese. 2023. Building "Design Empathy" among HCI Students for People with Disabilities. *The ASSETS workshop on A11yFutures: Envisioning the Future of Accessibility Research, October 17, 2023 (A11yFutures)* [Virtual]

W9. [CHI'23] **Tamanna Motahar**, Kazi Sinthia Kabir, Joshua Dawson, Jason Wiese. 2023. HCI Research Challenges in Complex Healthcare Context. *The CHI Symposium for the Workgroup on Interactive Systems in Healthcare (WISH@CHI'23)*

W8. [CSCW'23] **Tamanna Motahar**, Marina Kogan, Jason Wiese. 2022. Using Online Social Spaces for Information Seeking and Identity Construction for People with Spinal Cord Injuries. *CSCW 2022 Workshop: Information-Seeking, Finding Identity: Exploring the Role of Online Health Information in Illness Experience* [Virtual]

W7. [CHI'22] **Tamanna Motahar**, Jason Wiese. 2022. AI-driven Personal Informatics for Individuals with Severe Spinal Cord Injury. *CHI '22 Workshop: Grand Challenges for Personal Informatics and AI, CHI 2022*, [Virtual]

W6. [CHI'22] **Tamanna Motahar**, Jason Wiese. 2022. Designing Technology for Complex Self-care : Considerations for people with Spinal Cord Injury. *CHI '22 Workshop: Challenges, Tensions, and Opportunities in Designing Ecosystems to Support the Management of Complex Health Needs, CHI 2022*, New Orleans, LA

W5. [CHI'22] **Tamanna Motahar**, Jason Wiese. 2022. Expanding Disability Justice in HCI : Considerations of Holistic "Lived Experience". *CHI '22 Workshop: Dreaming Disability Justice in HCI, CHI 2022*, [Virtual]

W4. [Ubicomp'18] **Tamanna Motahar**. 2018. Secret Bot: A Video Streaming, Android Device Controlled Spy Robot. In *Proceedings of the 2018 ACM International Joint Conference and 2018 International Symposium on Pervasive and Ubiquitous Computing and Wearable Computers (Ubicomp)*, pp. 1789-1792. 2018

W3. [Ubicomp'18] *Maliha Binte Nur, **Tamanna Motahar**, Sayed Ibn Masud, Emrul Kaisar. RICKSHAW BUDDY: A Cost Effective Automated Auto Rickshaw Assistance System. In *Proceedings of the 2018 ACM International Joint Conference and 2018 International Symposium on Pervasive and Ubiquitous Computing and Wearable Computers (Ubicomp)*, pp. 190-193. 2018

W2. [CHI'18] Nova Ahmed, **Tamanna Motahar**, Sharmin Kabir and Munir Hasan. Supporting Missing Daughters, *CHI'18 Symposium: HCI across Borders, CHI 2018*, Montreal, Canada

W1. [MobileHCI'18] **Tamanna Motahar**. 2018. Socio-Technical Aspects of Text Entry. *Workshop on Socio-Technical Aspects of Text Entry, MobileHCI 2018*, Barcelona, Spain

Book Chapter

Ahsanur Rahman, **Tamanna Motahar**. "Big Graph Analytics." Data Analytics: Concepts, Techniques, and Applications. Edited by Mohiuddin Ahmed, Al-Sakib Khan Pathan, CRC Press, 9/21/2018, page 97- 130

Workshop Co-organised

WP2. [ASSETS'25] **Tamanna Motahar**, Vaishnav Kameswaran, Sara Moin, Vikram Kamath Cannanure, Maitraye Das, Giulia Barbareschi, Laura S. Gaytán-Lugo, Aditya Vashistha, Kurtis Heimerl, Syed Ishtiaque Ahmed, Neha Kumar, Nova Ahmed, Maya Cakmak. 2025. Accessibility Research Across Borders: Collaboration and Community Building in Accessibility and ICTD Research. In ACM Conference on Computers and Accessibility, *ASSETS '25*

WP1. [ASSETS'22] Maryam Bandukda, Giulia Barbareschi, Aneesha Singh, Dhruv Jain, Maitraye Das, **Tamanna Motahar**, Jason Wiese, Lynn Cockburn, Amit Prakash, David Frohlich, Catherine Holloway. 2022. A Workshop on Disability Inclusive Remote Co-Design. In ACM Conference on Computers and Accessibility, *ASSETS '22*

Professional Magazines

M3. Cella M Sum, Franchesca Spektor, Rahaf Alharbi, ... **Tamanna Motahar**, Kathryn E Ringland, Anastasia Schaadhardt, Laura Scheepmaker, Alicia Williamson. (2024). *Challenging Ableism: A Critical Turn Toward Disability Justice in HCI*. XRDS: Crossroads, The ACM Magazine for Students, 30(4), 50-55.

M2. **Tamanna Motahar**, Nova Ahmed. 2021. *Activism and COVID-19: Older Southeast Asian Women Embracing Technology* 2021. UXPA User Experience Magazine, The Magazine of the User Experience Professionals Association.

M1. Mahbuba Tasmin, Nova Ahmed, **Tamanna Motahar** 2021. *Rooting the Gender Polarity in Computer Science: A Study on Women in Computer Science Education in Bangladesh*. ACM-W Celebration, ACM-W Asia Pacific 2021.

Talks

Invited Talks

Spring, 2025 — ***Designing Technology for Individuals Sustaining Transition Induced Severe Motor Disability***, Speaker, Makeability Lab, University of Washington, USA. Host: Prof. Jon E. Froehlich

Fall, 2024 — ***Can Everyone Use a Fitbit? Designing Self-tracking Technology for People with Power Wheelchairs***, Speaker, DO-IT: AccessComputing Partner Meeting, University of Washington, USA. Host: AccessComputing

Spring, 2024 — ***Expanding Personal Informatics Research for People with Severe Motor Disabilities***, Speaker, CMU Accessibility Lunch, Carnegie Mellon University, Pittsburgh, USA. Host: Prof. Jeffrey Bigham

Spring, 2024 — ***Expanding Personal Informatics Research for People with Severe Motor Disabilities***, Speaker, CREATE, University of Washington, USA. Host: CREATE

Spring, 2024 — ***Expanding Personal Informatics Research for People with Severe Motor Disabilities***, University of Louisiana at Lafayette, LA

Spring, 2024 — ***Expanding Personal Informatics Research for People with Severe Motor Disabilities***, Oakland University, MI

Summer, 2023 — ***Can Everyone Use a Fitbit? Expanding Personal Informatics Technology for People with Severe Motor Disabilities***, Speaker, Digital Health Initiative (DHI) Symposium, University of Utah Health, Salt Lake City, USA. Host: Digital Health Initiative, University of Utah

Fall, 2022 — ***Personal Informatics for People with Motor Disabilities***, Speaker, SIGCHI Summer/Winter School, North South University, Bangladesh

Spring, 2021 — ***What do you Track? Why do you Track***, Speaker, North South University HCI Research Group [Virtual]

Fall, 2020 — ***My Life–Joys and Challenges***, Speaker, Celebration of International Women's Day, IEEE North South University Student Branch Women in Engineering (WIE) Affinity Group [Virtual]

Spring, 2020 — ***Workshop on Stress Management***, Speaker and Facilitator, Ada Lovelace Celebration, Dhaka, Bangladesh

Spring, 2018 — ***Women in Technology***, Keynote Speaker, Digital Women Series, EMK Center, Dhaka, Bangladesh; Host: Women in Digital, Bangladesh

Spring, 2018 — ***'Initiation of HCI: Ongoing Activities Globally at the SIGCHI Community"***, Speaker, Workshop on Human Computer Interaction, North South University, Dhaka, Bangladesh

Guest Lectures

Spring, 2025 — ***Designing Technology to Support Motor Disability Resulting from Traumatic Transitions***, Undergraduate Course: Technology for Social Good | Western Washington University; Host: Prof. Shameem Ahmed

Spring, 2025 — ***Expanding Personal Informatics Research for People with Severe Motor Disabilities***, ME Graduate Seminar | Tufts University; Host: Prof. Dave Miller

Fall, 2024 — ***Expanding Personal Informatics Research for People with Severe Motor Disabilities***, CSE 155 | Introduction to Human Computer Interaction, University of California, Merced. Host: Prof. Ahmed Sabbir Arif

Fall, 2024 — ***Expanding Accessibility Research for People with Severe Motor Disabilities***, CS 3020 | Research Forum, Kahlert School of Computing, University of Utah. Host: Dr. Kazi Sinthia Kabir

Fall, 2022 — ***Identifying Factors that Inhibit Self-care Behavior Among Individuals with Severe Spinal Cord Injury***, CS 3540 | Designing Human Centered Experiences, Kahlert School of Computing, University of Utah. Host: Prof. Eliane Wiese

Conference Presentations

Spring, 2024 ***Towards More Accessible Open Source AI Plat- forms***, the 2025 Conference on Research on Equitable and Sustained Participation in Engineering, Comput- ing, and Technology (RESPECT'25), NJIT, New Jersy, USA

Fall, 2024 ***Exploring how People with Spinal Cord Injuries Seek Support on Social Media***, The 26th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS'24), St. John's, Newfoundland and Labrador, Canada

Fall, 2024 ***Investigating Technology Adoption Soon After Sustaining a Spinal Cord Injury***, ACM International Joint Conference on Pervasive and Ubiquitous Computing (Ubicomp'24), Melbourne, Australia

Spring, 2023 ***Building "Design Empathy" for People with Disabilities: an Unsolved Challenge in HCI Education***, The 5th Annual Symposium on HCI Education (EduCHI '23) [Virtual]

Fall, 2022 ***A Review of Personal Informatics Research for People with Motor Disabilities***, ACM International Joint Conference on Pervasive and Ubiquitous Computing (Ubicomp'22), Atlanta, USA

Spring, 2022 ***Identifying factors that inhibit self-care behavior among individuals with severe spinal cord injury***, ACM CHI Conference (CHI'22), New Orleans, LA, USA

Spring, 2019 ***Toward Designing Mental Health Solution for Female Rohingya Refugees***, HCI Across Borders, CHI2019, Glasgow, Scotland

Fall, 2017 ***A Simulation Study on Light Scattering Effect on Water-borne Bacteriophage Virus Using Mie Analysis***, 2017 IEEE 17th International Conference on Bioinformatics and Bioengineering (BIBE), Washington, DC, USA

Panelist, Speaker, Invited Attendee

Spring, 2025 **Seminar Lead**, CREATE Coffee Chat: Intersection between Accessibility and Information and Communication Technologies for Development (ICTD) Research; Invited Speaker: Prof. Syed Ishtiaque Ahmed, University of Toronto

Fall, 2024 **Panelist**, Robotics and Accessibility Panel at CSE 493e - Accessibility Course at the University of Washington; Invited by: Prof. Jennifer Mankoff and Prof. Maya Cakmak

Fall, 2024 **Invited Guest**, Sync Global Digital Wellbeing Forum on "Human AI and Digital Wellbeing", Held with 79th United Nation General Assembly, New York

Fall, 2022 **Graduate Student Panelist**, Introduction to Ph.D. Seminar, Kahlert School of Computing, University of Utah

Fall, 2020 **Panelist**, SIGCHI Summer School, Dhaka, Bangladesh [Virtual]

Fall, 2019 **Invited Participant**, Global Literacy and Accessibility Challenge Workshop, Facebook Headquarters, Menlo Park, California

Spring, 2018 **Speaker**, HCI Seminar, "Leveraging Technology for a Better Tomorrow". IEEE Day Celebration, North South University, Bangladesh

Fall, 2018 **Speaker and Panelist**, International Women's Day Celebration, North South University IEEE Student Branch, Bangladesh

Fall, 2018 **Panelist and Mentor**, Techbeez: Women in ICT, Lighthouse Castle Partners, Women Techmakers Bangladesh and EMK Center, Dhaka Bangladesh

Spring, 2017 **Judge and Mentor**, IEEE Day'17 Hackathon Competition (IEEE North South Student Brunch), Dhaka Bangladesh

Poster Presentations

PS9. **Tamanna Motahar**. 2023. Designing Wheelchair-based Technology to Prevent Pressure Ulcer: A Human Centered Computing (HCC) Approach. *1st Mountain West Undergraduate Research Showcase in Computing, 2023*, University of Utah, Salt Lake City, UT

PS8. **Tamanna Motahar**. 2023. Designing Wheelchair-based Technology to Prevent Pressure Ulcer: A Human Centered Computing (HCC) Approach. *Grad Visit Day*, Kahlert School of Computing, University of Utah, Salt Lake City, UT

PS7. **Tamanna Motahar**. 2022. Exploring Technology Usage of Southeast Asian Elderly Women for Better Mental Health during COVID-19 Pandemic. *Late Breaking Work, CHI 2022*, New Orleans, LA

PS6. **Tamanna Motahar**. 2021. Improving Pressure Relief (PR) Adherence with Technology: A Human Centered Computing (HCC) Approach. *University of Utah CS Research Day* [Virtual]

PS5. **Tamanna Motahar**. 2019. Broadening Participation: Inclusion of Female Computing Students in Competitive Programming. *Grace Hopper Conference 2019*, Orlando, FL

PS4. **Tamanna Motahar**. 2019. Toward Designing Mental Health Solution for Female Rohingya Refugees. *HCI Across Borders, CHI2019* , Glasgow, Scotland (***Highest Voted Poster***)

PS3. **Tamanna Motahar**. 2019. The Wave of Inclusion at HCI: Participation Improvement of Female Students. *Workshop on CHInclusive, CHI2019*, Glasgow, Scotland

PS2. **Tamanna Motahar**. 2018. Supporting Missing Daughters. *HCI Across Borders, CHI2018* , Montreal, Canada (***Best Poster Award***)

PS1. **Tamanna Motahar**. 2018. Bornomala AR-bengali learning experience using augmented reality. *MobileHCI 2018* , Barcelona, Spain

Professional Experience

Research Experience

2024-2025	**Postdoctoral Researcher| Center for Research and Education on Accessible Technology and Experiences (CREATE)**, Advised by: Prof. Maya Cakmak, Paul G. Allen School of Computer Science and Engineering, University of Washington
2020 - 2024	**Research Assistant| Personal Data and Empowerment Lab (PeDEL)**, Advised by: Prof. Jason Wiese, Kahlert School of Computing, University of Utah
2019 - 2020	**Research Assistant | HCI-VIS Lab**, Advised by: Prof. Narges Mahyar, CICS, University of Massachusetts Amherst
2016 - 2019	**Faculty Researcher**, North South University, Bangladesh
2012 - 2013	**Graduate Researcher**, University of Alberta, Canada
2008 - 2010	**Graduate Researcher**, North South University, Bangladesh

Program Committee Member

Associate Chair (AC), Accessibility and Aging Subcommittee, ACM CHI conference, *CHI'26*

Program Committee Member, The 27th International ACM SIGACCESS Conference on Computers and Accessibility, *ASSETS'25*

Program Committee Member, The 7th Annual Symposium on HCI Education, *EduCHI'25*

Program Committee Member, The COMPSAC 2025 Symposium on Human Computing and Social Computing (HCSC)

Program Committee Member, ACM (*CHI* Late Breaking Work, CHI 2022- 2025

Technical Program Committee Member, ISWC Notes and Briefs, *UbiComp/ISWC 2024, 2025*

Program Committee Member, The 7th International Conference on Activity and Behavior Computing, 2025

Reviewer

The ACM Conference on Human Factors in Computing Systems (*CHI*) 2025*, 2024*, 2023, 2020
*= **Recognition for Outstanding Review**

The ACM Transaction on Interactive, Mobile, Wearable and Ubiquitous Technologies (*IMWUT*), 2025, 2024

The ACM SIGACCESS Conference on Computers and Accessibility, *ASSETS'25*

The 7th Annual Symposium on HCI Education, *EduCHI'25*

The Journal of Springer Nature, AI and SOCIETY 2025

Activity and Behavior Computing Conference (ABC 2025)

ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW), 2024

IEEE International Conference on Computers, Software, and Applications (COMPSAC), 2024

ACM Conference on Human Factors in Computing Systems (CHI), Late Breaking Work, 2019 - 2025

The Journal of Interacting with Computers

The International Journal of Human-Computer Interaction

ACM Journal on Computing and Sustainable Societies (JCSS)

International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS) 2022, Workshop

IEEE sponsored 2017 4th International Conference on Advances in Electrical Engineering (ICAEE), 2019, 2017

Teaching Experience

Spring, 2025	**Instructor| CSE 590K| Assistive Robotics Reading Group (12 Students)** , Paul G. Allen School of Computer Science and Engineering, University of Washington
Winter, 2025	**Instructor| CSE 590K| Assistive Robotics Reading Group (10 Students)** , Paul G. Allen School of Computer Science and Engineering, University of Washington
Fall, 2022	**Teaching Mentee| CS 3540| Designing Human Centered Experiences (78 Students)** , School of Computing, University of Utah
Fall, 2021	**Teaching Mentee|COMP 1010| Programming for All (220 Students)** , School of Computing, University of Utah
2019 - 2020	**Teaching Associate | Introduction to Programming (Java) (150 Students)**, CICS, UMass Amherst
Summer 2020	**Instructor | Introduction to Programming (Java) (80 Students)**, CICS, UMass Amherst
2019	**Senior Lecturer**, North South University, Bangladesh
2016 - 2018	**Lecturer**, North South University, Bangladesh

Organization and Service

2025	**Research Translation Mentor** , CREATE, University of Washington
2025	**Robotics Capstone Judge**, Spring Quarter, Paul G. Allen School of Computer Science and Engineering, University of Washington
2024	**Design Expert and Mentor**, Adaptive Solution: A Mini-Hackathon, by UW CREATE and HuskyADAPT, University of Washington
2023-2024	**Grad Representative**, Equity, Diversity and Inclusion Committee (EDI), College of Engineering, University of Utah
2023	**Organizer**, Summer HCI Writing Workshop, University of Utah
2022 - 2024	**General Member**, Graduate Student Advisory Committee (GradSAC), School of Computing, University of Utah
2022	**Student Volunteer**, Ubicomp and ISWC Conference, Atlanta, GA
2019	**Co-Organizer**, ACM SIGCHI Summer School, North South University, Bangladesh
2019	**Panel- Organizer**, HCI Research and Design Perspectives in Bangladesh (Virtual), Part of HCI Discussion Series in Bangladesh
2018	**Founding Organizer**, First National Level Inter University Girls' Programming Contest (IUGPC), Bangladesh
2018	**Organizer**, "Hour of Code", North South University ACM-W Student Chapter, Bangladesh
2018	**Organizer**, "Ask me about Women in Robotics-Trivia Challenge", Women's Day Contest, North South University, Bangladesh
2018	**Judge and Mentor**, "A Power Buzz -18", Hackathon Competition, IEEE North South Student Brunch, Bangladesh

Industry Experience

2013-2014	**Data Analyst,** , Business Intelligence (BI), Thakral Information Systems, (Strategic Alliance Partner of IBM) Airtel, Bangladesh
2012-2013	**Data Specialist**, West Canadian Digital Imaging, Edmonton, Canada
2010-2012	**Technical Support Specialist**, Marketlinc Telecommunication Corporation (McAfee Anti-Virus), Canada

Professional Service

2017-2019	**Founding Faculty Advisor**, First and only ACM-W Chapter in Bangladesh
2017-2019	**Founding Membership Chair**, First ACM SIGCHI Chapter in Bangladesh

Administrative Experience

2018-2019	**Assistant Proctor**, North South University, Bangladesh
2017-2018	**Course Coordinator**, CSE 225-Data Structure and Algorithm [8 Sections], Department of Electrical and Computer Engineering, North South University, Bangladesh

Student Mentees

2025- **Minji Han**, MS HCDE Student, Paul G. Allen School of Computer Science and Engineering, University of Washington,

2025- **Denby Frank**, BS Student, Paul G. Allen School of Computer Science and Engineering, University of Washington, Co-authored paper: [W10]

2025- **Vaishnavi Vidyasagar**, BS Student, Paul G. Allen School of Computer Science and Engineering, University of Washington, Co-authored paper: [W10]

2025- **Shreya Pandey**, BS Student, Paul G. Allen School of Computer Science and Engineering, University of Washington

2025- **John Lu**, BS Student, Paul G. Allen School of Computer Science and Engineering, University of Washington

2025- **Alvin Le**, BS Student, Paul G. Allen School of Computer Science and Engineering, University of Washington

2025- **Kenneth Ton**, BS Student, Paul G. Allen School of Computer Science and Engineering, University of Washington

2024 **Caelum Van Ispelen**, BS Student, Kahlert School of Computing, University of Utah

2024 **Rohan Siddamsettiwar**, BS Student, Kahlert School of Computing, University of Utah

2023- **Yeon Jae Kim** , BS Student, Kahlert School of Computing, University of Utah, Co-authored paper: [J7, P11, P12]

2023 **Eden Fisher**, Undergraduate Student, Co-authored paper: [J7]

2023- 2024 **Kraisorachote Harry Jens Phanich,** , BS/MS Student, Kahlert School of Computing, University of Utah

2019 **Mahbuba Tasmin, Computer Science Undergrad, North South University, Bangladesh**, Co-authored paper: [P8], Next Position: PhD Student, Umass Amherst

2018 - 2019 **Dibya P. Sarkar, Computer Science Undergrad, North South University, Bangladesh**, Co-authored paper: [P4,P6], [E3], Next Position: PhD Student, University of Victoria, Canada

2018 - 2019 **Kimia Tuz Zaman, Computer Science Undergrad, North South University, Bangladesh**, Co-authored paper: [P7], Next Position: PhD Student, North Dakota State University

2018 **Mostafa Didar Mahdi, Computer Science Undergrad, North South University, Bangladesh**, Co-authored paper: [P2], Next Position: MSC Student, University of Adelaide, Australia

Reference

1. Maya Cakmak, PhD (Postdoc Advisor), Professor, Paul G. Allen School of Computer Science and Engineering, University of Washington.

2. Jason Wiese, PhD (PhD Advisor), Associate Professor, Kahlert School of Computing, University of Utah

3. Mark W. Newman, Phd, Professor, School of Information, EECS Department, University of Michigan

4. Patrick Carrington, PhD, Assistant Professor, Human-Computer Interaction Institute, Carnegie Mellon University