Taslima Akter

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CURRENT EMPLOYMENT

Computing Innovation Fellow Postdoctoral Researcher June 2022 - present
University of California Irvine, *Irvine, CA*
Mentor: Dr. Anne Marie Piper

EDUCATION

PhD in Computer Science May 2022
Indiana University, *Bloomington, IN* Advisor: Prof. Apu Kapadia
Dissertation: Designing a privacy aware assistive system for people with visual impairments

M.Sc in Computer Science December 2019
Indiana University, *Bloomington, IN*

B.Sc in Computer Science & Engineering July 2014
Bangladesh University of Engineering & Technology (BUET), *Dhaka, Bangladesh*

PUBLICATIONS

Peer-reviewed Conference and Journal Papers:

- Ahmad, I., ***Akter, T.***, Buher, Z., Farzan, R., Kapadia, A., and Lee, A.J., "Tangible Privacy for Smart Voice Assistants: Measuring Users' Attitudes Towards User-Centric Sensor Designs", To Appear in Proceedings of the Computer Supported Cooperative Work and Social Computing **(CSCW '22)**.
- ***Akter, T.***, Ahmed, T., Kapadia, A., and Swaminathan, M., "Shared Privacy Concerns of the Visually Impaired and Sighted Bystanders with Camera Based Assistive Technologies", In the Proceedings of Transactions on Accessible Computing **(TACCESS '22)**. (Paper)
- ***Akter, T.***, Ahmed, T., Kapadia, A., and Swaminathan, M., "Privacy Considerations of the Visually Impaired with Camera Based Assistive Technologies: Misrepresentation, Impropriety, and Fairness", In the Proceedings of ACM SIGACCESS Conference on Computers and Accessibility **(ASSETS '20)**. [**acceptance rate 28%**] (Paper)
- ***Akter T.***, "Privacy Considerations of the Visually Impaired with Camera Based Assistive Tools", In the Proceedings of Conference Companion Publication of Computer Supported Cooperative Work and Social Computing **(CSCW Companion '20)**. (Paper)
- ***Akter, T.***, Dosono, B., Ahmed, T., Kapadia, A., and Semaan, B., "I am uncomfortable sharing what I can't see": Privacy Concerns of the Visually Impaired with Camera Based Assistive Applications", In the Proceedings of 29th USENIX Security Symposium **(USENIX Security '20)**. [**acceptance rate 16.1%**] (Paper, Presentation)
- Dosono, B., Rashidi, Y., ***Akter, T.***, Semaan, B., and Kapadia, A., "Challenges in Transitioning from Civil to Military Culture: Hyper-Selective Disclosure through ICTs", Proceedings of the ACM Journal: Human-Computer Interaction: Computer Supported Cooperative Work and Social Computing **(CSCW '18)**, Vol. 1, No. 2, Article 41. [**acceptance rate 27%**] (Paper)
- Zannat, H., ***Akter, T.***, Tasnim, M., and Rahman, A., "The coverage problem in visual sensor networks: A target oriented approach." Journal of Network and Computer Applications '16, Vol 75: 1-15. (Paper)
- Nurain, N., ***Akter, T.***, Zannat, H., Akter, M., Islam, A., and Kabir, H., "General-Purpose Multi-Objective Vertical Hand-off Mechanism Exploiting Network Dynamics." IEEE Conference on Wireless and Mobile Computing, Networking and Communications **(WiMob '15)**. (Paper)

Peer-reviewed Workshop Papers and Posters:

- ***Akter, T.***, "Privacy Considerations of the Visually Impaired with Camera-based Assistive Applications", Computer Supported Cooperative Work and Social Computing **(CSCW '20)**.
- ***Akter, T.***, Dosono, B., Ahmed, T., Kapadia, A., and Semaan, B., "Privacy Concerns of the Visually Impaired with Camera-based Assistive Applications", ACM SIGACCESS Conference on Computers and Accessibility **(ASSETS '19)**.
- ***Akter, T.***, Dosono, B., Ahmed, T., Kapadia, A., and Semaan, B., "AI vs Human Intelligence: Privacy Implications of Assistive Tools for Visually Impaired People", Grace Hopper Celebrations **(GHC '19)**.
- ***Akter, T.***, Dosono, B., Ahmed, T., Kapadia, A., and Semaan, B., "Privacy Implications of Assistive Tools for Visually Impaired People", Symposium On Usable Privacy and Security **(SOUPS '19)**.
- ***Akter, T.***, Dosono, B., Ahmed, T., Kapadia, A., and Semaan, B., "Privacy Implications of Human Intelligence Powered Assistive Tools for Visually Impaired People", Workshop on Bridging the Gap Between AI and HCI, ACM SIGCHI Conference on Human Factors in Computing Systems **(CHI '19)**.
- ***Akter, T.***, Dosono, B., Ahmed, T., Kapadia, A., and Semaan, B., " Privacy Concerns of People with Visual Impairments while Using Camera-based Assistive Technologies", CRA-W Grad Cohort workshop 2019.
- Dosono, B. , Rashidi, Y., ***Akter, T.***, Semaan, B., and Kapadia, A., "Challenges in Transitioning from Civil to Military Culture: Hyper-Selective Disclosure through ICTs", Midwest Security Workshop **(MSW '18)**.
- ***Akter, T.***, Ahmed, T., Connelly, K., Crandall, D., and Kapadia, A., "Privacy Risks of Using Camera Assisted Tools for People with Visual Impairments." CVPR workshop on The Bright and Dark Sides of Computer Vision: Challenges and Opportunities for Privacy and Security **(CV-COPS '17)**.
- Zannat, H., Akter, M., ***Akter, T.***, and Islam, A., "MOVH: General Purpose Multi-Objective Vertical Hand-off Mechanism with Higher Scalability and Higher Stability." *Mobile Computing and Human Computer Interaction **(MoHCI '14)**.*

RESEARCH EXPERIENCE

Indiana University Spring 2017 - Now
Research Assistant, Privacy Lab

- Led research to design technologies by understanding privacy behavior of people with visual impairments while sharing information with human-assistants vs AI-systems using mixed-method analysis.
- Used quantitative research methods to understand how to enhance privacy, viewer's satisfaction and sharing likelihood by applying filters on photos in the context of social media.
- Designed surveys to investigate the tangible privacy behavior of people in the context of voice assistance (e.g., Amazon alexa).
- Conducted an interview study (n=14) to explore the transition disclosure practices of Reserve Officers Training Corps (ROTC) students who are transitioning from an individualistic culture to military culture.

Microsoft Research Fall 2018
*UX Research Intern, **Team:** Technology for Emerging Market*

- Conducted surveys with visually impaired (n=128) and MTurk (n=136) participants to understand their shared privacy concerns in the context of camera-based assistive technologies.

Bangladesh University of Engineering & Technology Oct 2015
Research Assistant

- Developed multi-objective vertical hand-off mechanisms to select the best target network among the existing networks using multi-objective genetic algorithm.
- Developed a near optimal solution to maximum coverage with minimum sensors (MCMS) problem of visual sensor networks.

TEACHING EXPERIENCE

Teaching Assistant, Computer Science *Indiana University, Bloomington* Spring 2021, Fall 2020, 2016

- Mentored over 30 students on Technical Foundations of Cybersecurity.
- Mentored over 40 students on Security for Networked Systems.
- Mentored over 30 students on Computer Networks.

Lecturer, Computer Science & Engineering *University of Asia Pacific, Dhaka, Bangladesh* July 2016

- Taught over 200 students the topics on Operating Systems, and Programming in C.

Lecturer, Software Engineering *Daffodil International University, Dhaka, Bangladesh* April 2015

- Taught over 150 students the topics on Computer Architecture, and Programming in C and Java.

MENTORING STUDENT RESEARCHERS

- **Tim Trammel**, University of California Davis Psychology PhD student August 2021 - Present
- **Sabid Bin Habib**, Indiana University CS PhD Student June 2020 - January 2022
- **Imtiaz Ahmad**, Indiana University CS PhD Candidate June 2020 - July 2021
- **Siva Likitha Valluru**, Former Clemson University CS Masters Student May 2019 - December 2020

AWARDS & HONORS

- **Computing Innovation Fellows (CIFellows)** 2021
- **The Trust & Safety scholarship**, Cognizant Technology Solutions 2021-2022
- **Luddy Outstanding Graduate Research Assistant**, Indiana University 2020-2021
- **Doctoral Consortium**, CSCW travel grant 2020
- **PhD Dissertation** received Google Faculty Research Award 2020
- **Doctoral Consortium,** ASSETS travel grant 2019
- **Student Scholar**, CRA-W Grad Cohort Workshop 2019
- **Student Scholar**, Grace Hopper Conference 2017
- **Travel grant**, IEEE S&P 2017
- **Best Undergraduate Thesis Award**, Department of CSE, BUET 2014
- **Best Paper Award**, Mobile Computing and Human Computer Interaction (MoHCI) 2014
- **Distinguish Poster Award**, Department of CSE, BUET 2014
- **Academic Merit Scholarship** Department of CSE, BUET 2014
- **Dean's List Scholarship** Department of CSE, BUET 2012

ACADEMIC SERVICES

- **Program Committee Member**, ACM Conference on Computers and Accessibility (ASSETS) 2022
- **Co-chair, Poster/Demo session**, ACM Conference on Computers and Accessibility (ASSETS) 2022
- **Student Co-chair, Lightning Talks/Demos**, Symposium on Usable Privacy and Security (SOUPS) 2022
- **Member**, SOUPS Poster Program Committee 2022, 2021
- **PC Chair**, Workshop on Inclusive Privacy and Security (WIPS), SOUPS 2022, 2021
- **Peer Reviewer**, ACM Conference on Human Factors in Computing (CHI) 2022, 2021

- **Student Volunteer**, ACM Conference on Human Factors in Computing (CHI) 2021
- **Organizer**, Workshop on Inclusive Privacy and Security (WIPS), SOUPS 2020
- **Vice President**, Bangladesh Student Association (BDSA), Indiana University 2020
- **Organizer**, Poster Committee of Indiana Celebration of Women in Computing (InWIC) conference 2017
- **Volunteer**, Women In Computing Knowledge Based Showcase, Indiana University 2017
- **Co-chair**, Design and publication Committee, National Collegiate Programming Contest, Bangladesh 2016
- **Member**, Programming Contest and Software & Hardware Club of University of Asia Pacific 2015