Murtaza Tamjeed

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https://murtazatamjeed.github.io/

RESEARCH INTERESTS

Accessibility of Research: I want to make research more accessible. My current research focuses on investigating needs and then designing and developing support tools including strategies and software solutions to empower researchers with disabilities.

Accessibility vs. Usability: I conduct in-depth analysis of interplay between accessibility and usability, focusing on how usability issues lead to accessibility breakdowns and vice versa, and what strategies can improve usability and accessibility *together*.

User Reviews and Bias Machine Learning: I study accessibility in user reviews and bias in machine learning. My current project involves NLP to analyze and automate identification of accessibility user reviews, and investigate how NLP models are biased toward disability and in predicting and classifying accessibility-related user reviews.

EDUCATION

Rochester Institute of Technology (RIT)   **2024**
Ph.D. in Computing and Information Sciences
Advisor: Dr. Kristen Shinohara

Rochester Institute of Technology   **2020**
Master's in Software Engineering
Thesis Advisor: Dr. Mohammad Wiem Makauer

Kabul University   **2013**
Bachelor's in Computer Science
Thesis Advisor: Dr. Hasan Adelyar

PUBLICATIONS

Understanding Disability Services Toward Improving Graduate Student Support — *ACM SIGACCESS ASSETS21*
https://doi.org/10.1145/3441852.3471231

Usability, Accessibility and Social Entanglements in Advanced Tool Use by Vision Impaired Graduate Students — *ACM SIGCHI CSCW2022*
Under review

Accessible Computing Education in Colleges and Universities — *White Paper*
https://www.microsoft.com/en-us/research/uploads/prod/2021/01/Accessible-CS-Education-in-Colleges-and-Universities_Making-K12-Ed-Accessible.pdf

Finding the Needle in a Haystack: On the Automatic Identification of Accessibility User Reviews — *ACM CHI 2021*
https://doi.org/10.1145/3411764.3445281

Accessibility in User Reviews for Mobile Apps: An Automated Detection Approach — *Thesis*
https://scholarworks.rit.edu/theses/10511/

EXPERIENCE

Graduate Research Assistant   **AUG 2020 – Present**
Center for Accessibility and Inclusion Research (CAIR) Lab
- Leading an NSF-funded research project that aims to investigate how graduate students with disabilities manage inaccessibility in research. This work focuses on graduate students in STEM fields pursuing their doctoral degrees
- Investigating accessibility and usability of advanced tools used in research by blind and low vision doctoral students

Accessibility Tech Intern   **MAY 2022 – AUG 2022**
Yahoo!
- With Yahoo's Accessibility and Product Inclusion team, I provide expertise and support in various Yahoo product groups (Yahoo Mail, Yahoo Sports, Yahoo Finance, etc.) to build the products fully accessible
- Conduct user feedback analysis, user studies, and observations to answer *how accessible Yahoo products are*

Research Trainee   **JAN 2022 – Present**
AWARE-AI NSF program at RIT
- Participating in AI-HCI research track and receiving training by Dr. Huenerfauth and Dr. Shinohara
- Participating in lab rotations, grant writing, workshops, seminars, and talks

Lead Software Developer   **MAR 2015 – AUG 2018**
Tetra Tech
- Led a team of developers for development and growth of Afghanistan's Criminal Management System
- As a full-stack LAMP developer, I was responsible for the development and modification of new and existing functionality to the system using PHP MVC CodeIgniter framework
- Developed dynamic dashboards that reduced up to 50% report generating time for system users
- Successfully redesigned the user interface of the system by integrating Bootstrap
- Developed all code in accordance with relevant accessibility guidelines

Software Developer   **FEB 2013 – JAN 2015**
ADRAS
- Collaborated with teams of developers, designers, and project managers for the development and growth of Afghanistan's National Information Management System
- Designed and coded various features and modules for the system and evaluated with system users

Computer Science Lecturer   **MAR 2014 – AUG 2018**
Kabul University
- Taught HCI Foundations, Foundations of Software Engineering, Algorithms, and Data Analysis
- Advised and mentored senior students with their research and capstone projects

Computer Science Lecturer   **APR 2014 – FEB 2015**
Khatam-ul-Nabieen University
- Taught C# and CS Foundation courses
- Advised and mentored senior students with their research and capstone projects

GRUDUATE-LEVEL COURSES

Qualitative Research Methods	Cyberinfrastructure Foundation
Research Foundations (Quant)	Quantitative Foundations
Foundations of HCI	Foundation of Data Science
Engineering Accessible Software	Software Architecture
Software Evolution and Reengineering	Process Engineering
Software Quality Engineering	Software Modeling
Visual Analytics	Creative Critical Thinking

SCHOLARSHIPS & AWARDS
Ph.D. Merit Scholarship – Rochester Institute of Technology
Financial Support for Ph.D. Studies

Fulbright Foreign Student Program – U.S. Department of State
Prestigious Scholarship - Full coverage for earning master's in the United States

ITEC (Indian Technical and Economic Cooperation)
Full support for pursuing a specialized program on design and development of e-learning systems in India

WORKSHOPS
Workshop on Communicating Research with Broader Audiences: Policy and Decision-makers, Media, and Public
AWARE-AI NRT Program – Rochester Institute of Technology

Fulbright Enrichment and Leadership Seminar
Fulbright – University of California, Davis

REFERENCES
Will be furnished upon request