Peya Mowar

Carnegie Mellon University, Pittsburgh, PA
Tel.: +1 (412) 475-1171
Email: peyajm29@cmu.edu
Homepage: http://cs.cmu.edu/~peyajm29

Education

08/2023–08/2025 **MS (Thesis), Robotics**
Carnegie Mellon University (CMU), Pittsburgh, PA

08/2017–07/2021 **B.Tech., Information Technology**
Delhi Technological University (DTU), Delhi, India

Research Experience

09/2023–Current **Carnegie Mellon University**
Graduate Research Assistant, Robotics Institute
Advisors: Prof. Jeffrey P. Bigham, Prof. Aaron Steinfeld
Evaluating the effects of AI coding assistants in eliciting implicit developer behaviour towards accessible UI development.

11/2021–01/2023 **Microsoft Research India**
Research Fellow, Technology and Empowerment
Advisors: Dr. Saikat Guha, Dr. Mohit Jain
Examined news consumption behavior of blind participants and developed a document segmentation system for accessible e-papers through iterative prototyping.

01/2021–08/2021 **Trinity College Dublin**
Research Intern, School of Statistics and Computer Science
Advisor: Prof. Khurshid Ahmad
Studied impact of investor sentiment during elections on the financial market using vector auto-regressive analysis.

Relevant Publications

Conference Papers

1. **Peya Mowar**, Meghna Gupta, and Mohit Jain. Breaking the News Barrier: Towards Understanding News Consumption Practices among BVI Individuals in India, 2024. Forthcoming in *Proceedings of the 26th International ACM SIGACCESS Conference on Computers and Accessibility.*

Posters and Workshop Papers

1. **Peya Mowar**, Yi-Hao Peng, Aaron Steinfeld, and Jeffrey Bigham. Tab to Autocomplete: The Effects of AI Coding Assistants on Web Accessibility, 2024. *Under submission to the 26th International ACM SIGACCESS Conference on Computers and Accessibility (Posters Track).*
2. Yuvanshu Agarwal and **Peya Mowar**. Shifted Reality: Navigating Altered Visual Inputs with Multimodal LLMs. In *VizWiz Grand Challenge (CVPR Workshop)*, 2024.
3. **Peya Mowar**. Accessibility in AI-Assisted Web Development. In *Proceedings of the 21st International Web for All Conference (W4A)*, 2024.
4. **Peya Mowar**, Tanuja Ganu, and Saikat Guha. Towards Optimizing OCR for Accessibility. In *AVA: Accessibility, Vision, and Autonomy Meet (CVPR Workshop)*, 2022.

Engineering Experience

01/2023–06/2023 **Amazon Web Services Ireland**
Software Development Engineer, ElastiCache and MemoryDB
Automated snoozing of auto-update cluster scaling campaigns for suspended customers to reduce ops load by 31%.

08/2021–10/2021 **Morgan Stanley**
Technology Analyst, Institutional Securities Technology
Underwent an intensive 12-week training covering OS, C++ (taught by Bjarne Stroustrup!), Java, C#, Databases, Distributed Systems and UI/UX Patterns.

Honors, Awards, & Scholarships

2024 CIFAR Deep Learning + Reinforcement Learning (DLRL) Summer School Fee Waiver.

2024 W4A Google Doctoral Consortium.

2022 Microsoft Global Hackathon Award in the 'Hack for Next Billion Users' track.

2020 Ranked 1st in DTU (among 2360 students) with a GPA of 10.00 in the sixth semester.

2019 Media Coverage in Times of India for 'Divya Drishti' Hackathon Project.

2015 Letter of appreciation for being in the top 1% students from the HRD Minister of India.

Graduate Coursework

Computer Vision, Mathematical Fundamentals, Machine Learning (PhD Level), Designing Human-Centered Software, Generative AI, Multimodal Foundation Models

Community Services

University Services

1. Graduate Teaching Assistant, CMU AI Scholarship Program
2. Seminar Organiser, CMU Weekly Accessibility Group Lunch

External Reviewer

1. ACM Conference on Computer-Supported Cooperative Work & Social Computing (CSCW'24)
2. ACM SIGCHI conference on Human Factors in Computing Systems (CHI'24)

Talks

1. "News Consumption Behaviour of BVI Individuals in India", Accessibility Lunch, CMU
2. "Towards Optimizing OCR for Accessibility", EMPOWER 2022, IIT Madras Research Park
3. "Democratizing Printed Content", Technology and Empowerment Reading Group, Microsoft Research

[*CV compiled on July 12, 2024*]