# 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 Carnegie Mellon University (CMU), Pittsburgh, PA

MS (Thesis), Robotics

08/2017-07/2021 Delhi Technological University (DTU), Delhi, India

B.Tech., Information Technology

#### 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 Strous-

trup!), Java, C#, Databases, Distributed Systems and UI/UX Patterns.

# 05/2020–8/2020 Morgan Stanley

Technology Analyst Intern, Institutional Securities Technology

Transformed and loaded securities data in proprietary databases with 60% drop in la-

tency and traceable lineage.

### 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 August 2, 2024]