

Peya Mowar

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EDUCATION

- Aug 23 – Aug 25 **Carnegie Mellon University (CMU)**, Pittsburgh, PA
MS (Thesis), Robotics
Thesis (Tentative): Making AI Coding Assistants Useful for Accessible Web Development
Advisors: [Prof. Jeffrey P. Bigham](#), [Prof. Aaron Steinfeld](#)
Investigated AI coding assistants for accessibility and developed CodeA11y, a GitHub Copilot Extension, designed to help novice developers build accessible web components.
- Aug 17 – Jul 21 **Delhi Technological University (DTU)**, Delhi, India
B.Tech., Information Technology (9.14/10.0)

RESEARCH EXPERIENCE

- Nov 21 – Jan 23 **Microsoft Research India**
Research Fellow, Technology and Empowerment (TEM)
Advisors: [Dr. Saikat Guha](#), [Dr. Mohit Jain](#)
Examined news consumption behavior of blind participants and developed a document segmentation system for generating accessible e-papers through iterative prototyping.
- Jan 21 – Aug 21 **Trinity College Dublin**
Research Intern, School of Statistics and Computer Science
Advisor: [Prof. Khurshid Ahmad](#)
Studied the impact of investor sentiment on financial markets during elections using vector auto-regressive analysis, with sentiment derived from news articles in Hindi language.

SELECTED PUBLICATIONS

Conference Papers

1. **Peya Mowar**, Yi-Hao Peng, Jason Wu, Aaron Steinfeld, and Jeffrey Bigham. [CodeA11y: Making AI Coding Assistants Useful for Accessible Web Development](#), 2025. *Under Review at CHI 2025*.
2. **Peya Mowar**, Meghna Gupta, and Mohit Jain. [Breaking the News Barrier: Towards Understanding News Consumption Practices among BVI Individuals in India](#). In *The 26th International ACM SIGACCESS Conference on Computers and Accessibility*, pages 1–11, 2024

Posters and Workshop Papers

1. **Peya Mowar**, Yi-Hao Peng, Aaron Steinfeld, and Jeffrey P Bigham. [Tab to Autocomplete: The Effects of AI Coding Assistants on Web Accessibility](#). In *The 26th International ACM SIGACCESS Conference on Computers and Accessibility*, pages 1–6, 2024
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*, pages 123–125, 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

- Jan 23 – Jun 23 **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%.
- Aug 21 – Oct 21 **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.
- May 20 – Aug 20 **Morgan Stanley**
Technology Analyst Intern, Institutional Securities Technology
Transformed and loaded securities data in proprietary databases with 60% drop in latency and traceable lineage.

HONORS, AWARDS, & SCHOLARSHIPS

- 2024 CIFAR Deep Learning + Reinforcement Learning (DLRL) Summer School Fee Waiver.
- 2024 Google Scholarship for W4A 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, Designing Human-Centered Software, Generative AI, Multimodal Foundation Models

COMMUNITY SERVICES

University Services

- 2024 Graduate Teaching Assistant, CMU AI Scholarship Program
- 2023 – 2025 Seminar Organiser, CMU Weekly Accessibility Lunch
- 2024 Mentor, RoboBuddies Mentorship Program

External Reviewer

- 2024, 2025 ACM SIGCHI Conference on Human Factors in Computing Systems (CHI)
- 2024 ACM Conference on Computer-Supported Cooperative Work & Social Computing (CSCW)

Student Volunteer

- 2024 ACM SIGACCESS Conference on Computers and Accessibility (ASSETS)

Talks

- 2023 “News Consumption Behaviour of BVI Individuals in India”, Accessibility Lunch, CMU
- 2022 “Towards Optimizing OCR for Accessibility”, EMPOWER, IIT Madras Research Park
- 2022 “Democratizing Printed Content”, TEM Reading Group, Microsoft Research