

# Peya Mowar

Carnegie Mellon University, Pittsburgh, PA

Tel.: +1 (412) 475-1171

Email: [peyajm29@cmu.edu](mailto:peyajm29@cmu.edu)

Homepage: <http://cs.cmu.edu/~peyajm29>

## EDUCATION

---

- Aug 25 – Aug 28 **Carnegie Mellon University (CMU)**, Pittsburgh, PA  
(Incoming) PhD, Robotics
- 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 agents for accessibility and developed CodeA11y, a multi-agent LLM framework, designed to help novice developers build accessible web components.
- Aug 17 – Jul 21 **Delhi Technological University (DTU)**, Delhi, India  
B.Tech., Information Technology (9.12/10.0)

## 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. *Forthcoming 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