

AASHAKA DESAI

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EDUCATION

University of Washington, Paul G. Allen School of CS and Engineering

PhD Candidate in Computer Science

Advised by Dr. Jennifer Mankoff and Dr. Richard Ladner

SEATTLE, WA

2020 – PRESENT

University of Delaware

Bachelor of Science, double major in Computer Science and Cognitive Science, Cum Laude

GPA: 3.86

NEWARK, DE

MAY 2020

HONORS & AWARDS

Jeff Dean & Heidi Hopper Fellowship Recipient (2020-2021)

LEAP Fellow (Fall 2020 – Present)

Steven Geracimous Memorial Award (2020)

Outstanding Achievement in Undergraduate Cognitive Science (2020)

Arthur Ashe Jr. Sports Scholar Award (2020)

CAA Randolph Inspiration Award (2020)

ACM Member, Inductee of Chi Alpha Sigma National College Athletes Honors Society

PUBLICATIONS

CONFERENCE PAPERS

Investigating Dictionary Expansion for Video-Based Sign Language Dictionaries (In Submission) – A. Desai, D. Massiceti, R. Ladner, H. Daumé III, D. Bragg, A. X. Lu

Exploring Disability Culture Through Accounts of Disabled Innovators of Accessibility Technology (to appear ASSETS '25) – A. Desai, J. Mankoff, R. Ladner

Beyond Beautiful: Embroidering Legible and Expressive Tactile Graphics (to appear ASSETS '25) – M. E. Seehorne, C. Winston, B. Liu, G. S-H Kim, E. White, N. Gorkar, K. Glazko, A. Desai, J. Cao, M. Hofmann, J. Mankoff

Toward Language Justice: Exploring Multilingual Captioning for Accessibility (CHI '25) – A. Desai, R. Alharbi, S. Hsueh, R. Ladner, J. Mankoff

Exploring Reduced Feature Sets for American Sign Language Dictionaries (CHI '25) – B. Kosa, A. Desai, A. X. Lu, R. Ladner, D. Bragg

ASL Citizen: A Community Sourced Dataset for Advancing Isolated Sign Language Recognition (NeurIPS '23) – A. Desai, L. Berger, F. Minakov, V. Milan, C. Singh, K. Pumphrey, R. Ladner, H. Daumé III, A. X. Lu, N. Caselli, D. Bragg

Working at the Intersection of Race, Disability, and Accessibility (ASSETS '23) – C. Harrington, A. Desai, A. Lewis, S. Moharana, A. Ross, J. Mankoff

Understanding and Enhancing Speechreading Experiences for Accessible Communication in an Online Context (CHI '23) – **A. Desai**, J. Mankoff, R. Ladner

EXTENDED ABSTRACTS, POSTERS & OTHER WORKS

Systemic Biases in Sign Language AI Research: A Deaf-Led Call to Reevaluate Research Agendas (LREC COLING '24) – **A. Desai**, M. De Meulder, J. A. Hochgesang, A. Kocab, A. X. Lu

Language Technology at the Margins: Designing for Fluidity in d/DHH Communication Accessibility (ASSETS '23 Doctoral Consortium) – **A. Desai**

Maintaining the Accessibility Ecosystem: a Multi-Stakeholder Analysis of Accessibility in Higher Education (ASSETS '23) – K. Mack, N. Sidik, **A. Desai**, E. McDonnell, K. Mehta, C. Zhang, J. Mankoff

An Autoethnographic Case Study of Generative Artificial Intelligence's Utility for Accessibility (ASSETS '23) – K. Glazko, M. Yamagami, **A. Desai**, K. Mack, V. Potluri, X. Xu, J. Mankoff

Enhancing Access to High Quality Tangible Information through Machine Embroidered Tactile Graphics (SCF Poster) – M. E. Seehorne, G. S-H Kim, **A. Desai**, M. Hofmann, J. Mankoff

Using Fiber Arts and Sonification to Improve Data Accessibility of Maker Spaces (CHI '22 Workshop) – **A. Desai**, V. Potluri, A. Lewis, D. Campos Zamora, J. Mankoff, R. Ladner

RESEARCH EXPERIENCE

Microsoft Research

SEATTLE, WA

Research Intern; Advised by Dr. Danielle Bragg, Dr. Alex Lu, Dr. Hal Daumé III

SUMMER 2022 & 2023

- Analyze and clean a community curated isolated sign language (ISLR) dataset for dissemination
- Implement state-of-the-art supervised approaches for ISLR as benchmarks, along with unsupervised approaches to ISLR
- Frame ISLR applications grounded in needs and wants of DHH community
- Explore few-shot learning and representation learning techniques to support dictionary expansion

Make4all Lab

SEATTLE, WA

Research Assistant

SUMMER 2021

- Review relevant literature, design projects, and develop related study material and protocols
- Recruit and match undergraduates to projects and mentors
- Facilitate weekly group meetings, tutorials, feedback sessions

Speech Language Acquisition and Multilingualism Lab

NEWARK, DE

Research Assistant; Advised by Dr. Giovanna Morini

SPRING 2019 – SUMMER 2020

- Recruit participant and create animated stimuli for lab studies using Java & ShotCut
- Help analyze data by coding participant videos in SuperCoder and parsing SuperCoder files
- Develop software to analyze eye-gaze participant videos for studies that use preferential looking procedure, along with a variation that supports data collected using Tobii Eye-Tracking Software

TEACHING & MENTORING

CSE 590W: CREATE Accessibility Seminar
Lead Facilitator

SEATTLE, WA
FALL 2023-PRESENT

CSE 513: Disability Inclusion for Technologists
Teaching Assistant

SEATTLE, WA
SPRING 2024

CSE 446/546: Machine Learning
Teaching Assistant

SEATTLE, WA
FALL 2021

Mentoring Undergraduate Researchers

- Benjamin Epstein, Aagney Iyer, Sophia Lin (*Multilingual Captioning*)
- David Martin, Ben Kosa (*Sign Language Dictionaries*)
- Gene S-H Kim, Ellie Seehorne, Claris Winston (*Embroidered Tactile Graphics*)
- Karman Singh (*Speechreading*)

INVITED TALKS & PANELS

INFO 352: Gender, Race, and Information Technology (UW)
Panelist for Dr. Wanda Pratt

SPRING 2025

- Panel on Ableism and Accessible Technology

CSE 493: Accessibility (UW)
Panelist for Dr. Jennifer Mankoff

FALL 2024

- Panel on Intersectionality in Accessibility Research

HCDE 515: Accessibility and Inclusive Design (UW)
Guest Lecture for Dr. Leah Findlater

SPRING 2024

- Designing for Language in Sign Language Technology and Research

Deaf Safe AI: Symposium on AI and Sign Language Interpreting (Brown University)
Keynote Speaker

SPRING 2024

- Designing for Language in Sign Language Technology and Research

UW Public Lecture Series (UW)
Co-Moderator for Conversation with Patty Berne from Sins Invalid

WINTER 2024

- Disability Justice: Centering Intersectionality and Liberation

INFO 300: Research Methods (UW)
Guest Lecture for Dr. Wes King

FALL 2023

- Language Technology at the Margins: Designing for d/DHH Communication Accessibility

CSE Colloquium (UW)
Presenter

FALL 2023

- Working at the Intersection of Race, Disability, and Accessibility

CS Next Grad School Prep Workshop (UW)

SPRING 2023

Presenter

- Understanding and Enhancing Speechreading Experiences for Accessible Communication Online

Race, Disability & Technology: A Cross-Campus Conversation (UW CREATE)

WINTER 2023

Panelist

- Multilingual Captioning Accessibility for d/DHH and Disabled Caption Users

HCDE 515: Accessibility and Inclusive Design (UW)

WINTER 2023

Guest Lecture for Dr. Sarah Coppola

- Understanding and Enhancing Speechreading Experiences for Accessible Communication Online

RELEVANT COURSEWORK

Graduate Level: Deep Learning, Natural Language Processing, Mobile and Wireless Systems, Human-Computer Interaction, Data Visualization, Ethics in AI, Seminar in HCI & Accessibility, Intro to American Sign Language (101 – 103), Foundations in Critical Disability Studies

Undergraduate Level: Machine Learning, Artificial Intelligence, Computer Vision, Structure of Language, Introduction to Communication Disorders, Brain and Behavior, Elements of Cognitive Science

SKILLS

- Proficient in Java, C, C++, Python; Basic knowledge of ISL and R
- Experience working in Unix/Linux environment, PyTorch, Tobii Lab Projects, SuperCoder, ShotCut
- Languages: English (fluent), Gujarati (fluent), Hindi (intermediate), French (basic), Arabic (basic), American Sign Language (intermediate; learning)

Department Service

Make4all Lab Meeting Coordinator

2022–

UW Prospective Visit Days Volunteer

2022–

PAMS mentor

2023–

New Grad Mentor

2021– 2022

Care Committee Volunteer

PRESENT

Reviewing

- CHI (2023*, 2024, 2025)
- NeurIPS (2025)
- IMWUT (2024)

‘*’ Indicates Special Recognition for Outstanding Reviews

Miscellaneous

University of Delaware Golf Team Athlete, Captain (2019-2020)	FALL 2016 – SPRING 2020
Community Loaves Baker	PRESENT
Blue Hen Golf Camp	SUMMER 2019
Fundraising for B+ Foundation for Pediatric Cancer; Reps 4 Kids Participant	FALL 2016 – FALL 2019
Volunteer Marshal at Omega Dubai Desert Classic/Ladies Masters	2012– 2015– 2020
