Dhruv **Jain**

University of Michigan, Ann Arbor
Assistant Professor of Computer Science
Assistant Professor of Information

ACM SIGCHI VP for Accessibility

Employment

2023 – | **University of Michigan, Ann Arbor**
Assistant Professor, Computer Science & Engineering
Assistant Professor (Courtesy), School of Information

2021 | **Apple,** Research Intern
Managers: Colin Lea, Jeffrey Bigham

2021 | **Google,** Research Intern
Managers: Alex Olwal, Ruofei Du

2020 | **Microsoft Research,** Research Intern
Managers: Meredith Morris, Sasa Junuzovic

2014 | **University of Maryland, College Park,** Research Intern
Host: Jon Froehlich, Leah Findlater

2013 | **Microsoft Research India,** Research Intern
Managers: Kalika Bali, Ed Cutrell

2013 | **Packard Foundation,** Software Intern
Manager: Aaditeshwar Seth

2012 | **University of Wisconsin Madison,** Research Intern
Host: Vinay Ribeiro

2012 | **Stanford India Biodesign,** Visiting Researcher
Mentors: Pragun Goyal, Mayank Kumar

Education

2022 | **Ph.D. Computer Science & Engineering,** University of Washington
Advisors: Jon Froehlich, Leah Findlater

2019 | **M.S. Computer Science & Engineering,** University of Washington

2016 | **M.S. Media Lab,** Massachusetts Institute of Technology
Advisor: Chris Schmandt

2013 | **B.S. Computer Science & Engineering,** Indian Institute of Technology Delhi
Advisors: M. Balakrishnan, P.V.M. Rao

Selected Awards & Honors

2023 | **Google Research Scholar Award**

ACM SIGCHI Outstanding Dissertation Award

DO-IT Trailblazer Award

2022 | **William Chan Memorial Dissertation Award,** University of Washington

2021 | **Google-CMD-IT Leap Alliance Fellowship**

Microsoft Research Dissertation Grant

Best Paper Award, ACM DIS

Best Paper Honorable Mention ACM CHI

Best Paper Honorable Mention, ACM ASSETS

2020	**Best Artifact Award,** ACM ASSETS
	Best Paper Honorable Mention, ACM ASSETS
	People's Choice Most Upvoted Talk, ACM ASSETS
2019	**Madrona Prize,** University of Washington
2015	**Google Lime Fellowship**
	Best Paper Honorable Mention, ACM ASSETS
2013	**iCampus Prize,** Massachusetts Institute of Technology
2012	**IIT Delhi Alumni Award**
	Best Undergraduate Thesis Award, Indian Institute of Technology Delhi
	Govt. of India Young Innovators Award
	Best Paper Award, TRANSED
2011	**Undergraduate Summer Research Scholar,** Indian Institute of Technology Delhi
2009	**All India Rank 1,** Joint Entrance Exam (IIT-JEE) - PD category

Invited Articles

2023
27

Mack, K., Das, M., **Jain, D.,** Bragg, D., Tang, J., Begel, A., Beneteau, E., Davis, J.U., Glasser, A., Park, J.S. and Potluri, V., 2023. Mixed Abilities and Varied Experiences: A Group Autoethnography of a Virtual Summer Internship. *Communications of the ACM Research Highlights (CACM 2023),* 66(8), pp. 105-113
From ACM's website: "CACM's RH section is devoted to the most significant recent research results published in computing. [...] With a readership of over 100,000 from over 100 countries, publication in CACM-RH provides unmatched visibility and is regarded as a significant honor." (more on the selection process)

2022
26

Jain, D., Ngo, H., Patel, P., Goodman, S., Nguyen, K., Grossman-Kahn, R., Findlater, L. and Froehlich, J., 2022. SoundWatch: Deep Learning for Sound Accessibility on Smartwatches. *Communications of the ACM Research Highlights (CACM 2022)*, 65(6), pp. 100-108.

Peer-Reviewed Publications

2024
25

Huang, J., Wood, R., Chhabria, H., and **Jain, D.**, 2024, April. Show, Not Tell: A Human-AI Collaborative Approach for Designing Sound Awareness Systems. In *Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems (CHI 2024)* (pp. 1-11).

2023
24

Do, H., Dang, Q., Huang, J., and **Jain, D.**, 2023, October. AdaptiveSound: An Interactive Feedback-Loop System to Improve Sound Recognition for Deaf and Hard of Hearing Users. In *Proceedings of the 25th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2023)* (pp. 1-13).

23

Huang, J., Chhabria, H., and **Jain, D.**, 2023, October. "Not There Yet": Evaluating the Feasibility and Challenges of Mobile Sound Recognition to Support Deaf and Hard-of-Hearing People. In *Proceedings of the 25th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2023)* (pp. 1-13). Best Paper Honorable Mention

2022
22

Jain, D., 2022. Sound Sensing and Feedback Techniques for Deaf and Hard of Hearing People *(Doctoral dissertation, University of Washington)* (175 pages).

21

Lea, C., Huang, Z., **Jain, D.,** Tooley, L., Liaghat, Z., Thelapurath, S., Findlater, L., and Bigham, J.P., 2022, May. Nonverbal Sound Detection for Disordered Speech. In *Proceedings of the 2022 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)* (pp. 7397-7401). IEEE.

20

Jain, D., Huynh Anh Nguyen, K., M. Goodman, S., Grossman-Kahn, R., Ngo, H., Kusupati, A., Du, R., Olwal, A., Findlater, L., and E. Froehlich, J., 2022, April. ProtoSound: A Personalized and Scalable Sound Recognition System for Deaf and Hard-of-Hearing Users. In *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems (CHI 2022)* (pp. 1-16).

2021
19

Jain, D., Junuzovic, S., Ofek, E., Sinclair, M., R. Porter, J., Yoon, C., Machanavajhala, S., and Ringel Morris, M., 2021, October. Towards Sound Accessibility in Virtual Reality. In *Proceedings of the 2021 International Conference on*

Multimodal Interaction (ICMI 2021) (pp. 80-91).

18 **Jain, D.,** Junuzovic, S., Ofek, E., Sinclair, M., Porter, J., Yoon, C., Machanavajhala, S., and Ringel Morris, M., 2021, June. A Taxonomy of Sounds in Virtual Reality. In *Designing Interactive Systems Conference (DIS 2021)* (pp. 160-170). Best Paper Award

17 Mack, K., Das, M., **Jain, D.,** Bragg, D., Tang, J., Begel, A., Beneteau, E., Davis, J.U., Glasser, A., Park, J.S., and Potluri, V., 2021, October. Mixed Abilities and Varied Experiences: A Group Autoethnography of a Virtual Summer Internship. In *Proceedings of the 23rd International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2021)* (pp. 1-13). Best Paper Honorable Mention

16 Goodman, S.M., Liu, P., **Jain, D.,** McDonnell, E.J., Froehlich, J.E., and Findlater, L., 2021. Toward User-Driven Sound Recognizer Personalization with People Who Are d/Deaf or Hard of Hearing. *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT 2021)*, 5(2), pp.1-23.

15 Mack, K., McDonnell, E., **Jain, D.,** Lu Wang, L., E. Froehlich, J., and Findlater, L., 2021, May. What Do We Meant by "Accessibility Research"? A Literature Survey of Accessibility Papers in CHI and ASSETS From 1994 to 2019. In *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems (CHI 2021)* (pp. 1-18). Best Paper Honorable Mention

2020
14 **Jain, D.,** Chiu, B., Goodman, S., Schmandt, C., Findlater, L., and Froehlich, J.E., 2020, September. Field Study of a Tactile Sound Awareness Device for Deaf Users. In *Proceedings of the 2020 ACM International Symposium on Wearable Computers (ISWC 2020)* (pp. 55-57).

13 **Jain, D.,** Ngo, H., Patel, P., Goodman, S., Findlater, L., and Froehlich, J., 2020, October. SoundWatch: Exploring Smartwatch-Based Deep Learning Approaches to Support Sound Awareness for Deaf and Hard of Hearing Users. In *Proceedings of the 22nd International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2020)* (pp. 1-13). Best Artifact Award

12 **Jain, D.,** Potluri, V., and Sharif, A., 2020, October. Navigating Graduate School with a Disability: A Trio-Ethnography. In *Proceedings of the 22nd International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2020)* (pp. 1-11). Best Paper Honorable Mention; People's Choice Most Upvoted Talk

11 **Jain, D.,** Mack, K., Amrous, A., Wright, M., Goodman, S., Findlater, L., and Froehlich, J.E., 2020, April. Homesound: An Iterative Field Deployment of An In-Home Sound Awareness System for Deaf or Hard of Hearing Users. In *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems (CHI 2020)* (pp. 1-12).

10 Goodman, S., Kirchner, S., Guttman, R., **Jain, D.,** Froehlich, J., and Findlater, L., 2020, April. Evaluating Smartwatch-Based Sound Feedback For Deaf and Hard-of-Hearing Users Across Context. In *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems (CHI 2020)* (pp. 1-13).

2019
9 **Jain, D.,** Desjardins, A., Findlater, L., and Froehlich, J.E., 2019, October. Autoethnography of a Hard of Hearing Traveler. In *Proceedings of the 21st International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2019)* (pp. 236-248). Best Paper Honorable Mention

8 **Jain, D.,** Lin, A., Guttman, R., Amalachandran, M., Zeng, A., Findlater, L., and Froehlich, J., 2019, May. Exploring Sound Awareness in the Home for People Who Are Deaf or Hard of Hearing. In *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems (CHI 2019)* (pp. 1-13).

7 Findlater, L., Chinh, B., **Jain, D.,** Froehlich, J., Kushalnagar, R., and Lin, A.C., 2019, May. Deaf and Hard-of-Hearing Inviduals' Preferences for Werable and Mobile Sound Awareness Technologies. In *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems (CHI 2019)* (pp. 1-13).

2018
6 **Jain, D.,** Franz, R., Findlater, L., Cannon, J., Kushalnagar, R., and Froehlich, J., 2018, October. Towards Accessible Conversations in a Mobile Context for People who are Deaf and Hard of Hearing. In *Proceedings of the 20th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2018)* (pp. 81-92).

2016
5 **Jain, D.,** Sra, M., Guo, J., Marques, R., Wu, R., Chiu, J., and Schmandt, C., 2016, October. Immersive Scuba Diving Simulator Using Virtual Reality. In *Proceedings of the 29th Annual Symposium on User Interface Software and Technology (UIST 2016)* (pp. 729-739).

4   **Jain, D.,** Findlater, L., Gilkeson, J., Holland, B., Duraiswami, R., Zotkin, D., Vogler, C., and Froehlich, J.E., 2015, April. Head-Mounted Display Visualizations to Support Sound Awareness for the Deaf and Hard of Hearing. In *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems (CHI 2015)* (pp. 241-250).

2014   **Jain, D.,** 2014, October. Path-Guided Indoor Navigation for the Visually impaired Using Minimal Building
3   Retrofitting. In *Proceedings of the 16th international ACM SIGACCESS conference on Computers & accessibility (ASSETS 2014)* (pp. 225-232).

2   Singhal, A., Jain, P., Chanana, P., **Jain, D.,** Paul, R., Balakrishnan, M., and Rao, P.V.M., 2013, August. Application of Shape Memory Alloy (SMA) Based Actuation for Refreshable Display of Braille. In *International Design Engineering Technical Conferences and Computers and Information in Engineering Conference* (Vol. 55911, p. V004T08A053). American Society of Mechanical Engineers (ASME).

1   **Jain, D.,** Agrawal, P., Maheshwari, K., Mittal, A., Gupta, A., Ollagnier A., Goyal, A., Paul, R., Ranjan, A., Gupta, A.,
🏆   Paldhe, M., Das, S., Sanyal, S., Taneja, Y., Manocha, D., Balakrishnan, M., and Rao, P.V.M., 2012, September. Design and User Testing of An Affordable Cellphone Based Indoor Navigation System for Visually Impaired. In *Proceedings of the International Conference on Mobility and Transport for Older Adults and People with Disabilities (TRANSED 2012)* (pp. 1-13). Best Paper Award

Lightly-Reviewed Publications

12   Chang, R.C., Hung, C.S., **Jain, D.**, and Guo, A., 2023, October. SoundBlender: Manipulating Sounds for Accessible Mixed-Reality Awareness. In *Adjunct Proceedings of the 35th Annual ACM Symposium on User Interface Software and Technology (UIST 2023)*.

11   Wang, L.L., Mack, K., McDonnell, E.J., **Jain, D.,** Findlater, L., and Froehlich, J.E., 2021, May. A Bibliometric Analysis of Citation Diversity in Accessibility and HCI Research. In *Extended Abstracts of the 2021 CHI Conference on Human Factors in Computing Systems (CHI 2021 Ext. Abs.)* (pp. 1-7).

10   Guo, R., Yang, Y., Kuang, J., Bin, X., **Jain, D.,** Goodman, S., Findlater, L., and Froehlich, J., 2020, October. HoloSound: Combining Speech and Sound Identification for Deaf or Hard of Hearing Users on a Head-Mounted Display. In *Proceedings of the 22nd International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2020)* (pp. 1-4).

9   Goodman, S**., Jain, D.,** Froehlich, J., Craft, B., and Findlater, L. 2019, May. Social Tensions with Head-Mounted Displays for Accessibility. In *Workshop Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems (CHI 2019 Workshop)* (pp. 1-6).

8   **Jain, D.,** Chinh, B., Findlater, L., Kushalnagar, R., and Froehlich, J., 2018, May. Exploring Augmented Reality Approaches to Real-Time Captioning: A Preliminary Autoethnographic Study. In *Proceedings of the 2018 ACM Conference Companion Publication on Designing Interactive Systems (DIS 2018)* (pp. 7-11).

7   Sra, M., **Jain, D.,** Caetano, A.P., Calvo, A., Hilton, E., and Schmandt, C., 2016, October. Resolving Spatial Variation and Allowing Spectator Participation in Multiplayer VR. In *Adjunct Proceedings of the 29th Annual ACM Symposium on User Interface Software and Technology (UIST 2016)* (pp. 221-222).

6   **Jain, D.,** Sra, M., Guo, J., Marques, R., Wu, R., Chiu, J., and Schmandt, C., 2016, May. Immersive Terrestrial Scuba Diving Using Virtual Reality. In *Proceedings of the 2016 CHI Conference Extended Abstracts on Human Factors in Computing Systems (CHI 2016 Ext. Abs.)* (pp. 1563-1569).

5   **Jain, D.,** Babbitt, G., Canning, J., and Willmer-Shiles, E., 2016, May. Towards Interactive Force-Sensitive Digitally Encoded Materials for Architectural Models and Construction. In *Workshop Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems (CHI 2016 Workshop)* (pp. 1-4)

4   **Jain, D.** and Schmandt, C., 2015, October. JogCall: A Persuasive System for Couples to Jog Together. In *Adjunct Proceedings of the 2015 International Conference on Persuasive Technology (Persuasive 2015)* (pp. 1-3).

3   **Jain, D.,** 2014, October. Pilot evaluation of a path-guided indoor navigation system for visually impaired in a

public museum. In *Proceedings of the 16th international ACM SIGACCESS conference on Computers & accessibility (ASSETS 2014)* (pp. 273-274).

2 **Jain, D.,** Jain, A., Paul, R., Komarika, A., and Balakrishnan, M., 2013, October. A Path-Guided Audio Based Indoor Navigation System for Persons with Visual Impairment. In *Proceedings of the 15th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2013)* (pp. 1-2).

1 **Jain, D.,** Gupta, H., Gautam, D., Kumar, M., Ribeiro, V., and Sharma, M., 2013, January. Whitespace Networks for Vehicular Communication. In *2013 Fifth International Conference on Communication Systems and Networks (COMSNETS 2013)* (pp. 1-2). IEEE.

Workshop and Panel Organization

4 Vivacqua, A.S.; Kumar N., Bidwell, N.J.; Awori, K.; Gerling, K.; **Jain, D.**; Kun, A.L. and Yamashita, N., 2023. Realizing Values in Hybrid Environments: A SIGCHI Perspective. In *Companion Publication of the 2023 Conference on Computer Supported Cooperative Work and Social Computing (CSCW 2023),* 5 pages.

3 Bandukda, M., Barbareschi, G., Singh, A., **Jain, D.,** Das, M., Motahar, T., Wiese, J., Cockburn, L., Prakash, A., Frohlich, D. and Holloway, C., 2022, October. A Workshop on Disability Inclusive Remote Co-Design. *In Proceedings of the 24th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2022)* (pp. 1-5).

2 Hofmann, M., Bennett, C.L., Feng, J.H., **Jain, D.,** Ladner, R. and Mankoff, J., 2021, May. 2021 SIG on Access in SIGCHI. In *Extended Abstracts of the 2021 CHI Conference on Human Factors in Computing Systems (CHI 2021 Ext. Abs.)* (pp. 1-3).

1 Jain, P., Ibtasam, S., Sharma, S., Bhattacharya, N., Tuli, A., Gamage, D., **Jain, D.,** Tulaskar, R., Chandra, P., Razaq, L. and Rony, R.J., 2021, May. From the Margins to the Centre: Defining New Mission and Vision for HCI Research in South Asia. In *Extended Abstracts of the 2021 CHI Conference on Human Factors in Computing Systems (CHI 2021 Ext. Abs.)* (pp. 1-6).

Products and Open-Source Releases

2024 **AdaptiveSound: A Reinforcement "Feedback-Loop" Sound Recognition Codebase and App**
Available on [Github](#)

2022 **ProtoSound: Personalized Sound Recognition Codebase and Mobile App**
Available on [Github](#)

2021 **SoundVR: Sound Accessibility in Virtual Reality Codebase**
Available on [microsoft.com](#)

2020 **SoundWatch: Smartwatch Sound Recognition App and Codebase**
Available on [Github](#) and [Google Play Store](#) **(4,000+ downloads)**

2020 **HoloSound: Augmented Reality Sound Awareness Codebase**
Available on [Github](#)

2013 **Roshni: Indoor Navigation System for Visually Impaired**
Installed in the National Science Museum India **(100,000+ users)**

Grants & Other Supports

2024 – 2026 **Developing Patient Education Materials to Address the Needs of Patients with Sensory Disabilities**
Co-PI; NIH/NLM G08; $450,000

2023 **Sound Awareness Systems to Support People Who are Deaf or Hard of Hearing**
PI; Google Research Scholar Award; $60,000

Summer Student Support
Co-PI; E-Health and Artificial Intelligence at U-M; $12,000

2022	**LEAP Conference Organization Support**
	CMD-IT LEAP Alliance; $5000
2021 – 2022	**Sound Sensing and Feedback Techniques for Deaf and Hard of Hearing Users**
	Google CMD-IT-Leap Alliance Grant; $25,000
2021 – 2022	**Advancing Sound Accessibility**
	Microsoft Research Dissertation Grant; $25,000
2020 – 2021	**Moving Beyond Speech: Designing New Sound Feedback Visualizations for Deaf & Hard of Hearing Users**
	Co-PI; UW Reality Lab Grant; $50,000
2018	**AccessComputing Travel Support for Students with Disabilities**
	Gift from AccessComputing; $2,500
2015 – 2016	**Scuba Diving Simulation Using Virtual Reality**
	Gift from MIT Council of Arts; $4,000
2015	**Wearable Devices to Support Sound Awareness for Deaf & Hard of Hearing Users**
	Gift from MIT Public Service Center; $1,600
2014 - 2016	**Indoor Navigation System for the Visually Impaired Using Minimal Building Retrofitting**
	Co-PI; Samsung University Relations Grant; INR 1,200,000

Teaching

Winter '23 '24	**EECS 495: Accessible Computing,** University of Michigan
Fall '24	**EECS 493: User Interface Design,** University of Michigan
Fall '23	**EECS 598: Advanced Accessibility,** University of Michigan
Spring '18	**CSE 440: Introduction to HCI,** University of Washington (TA for Katharina Reinecke)
Fall '17	**CSE 440: Introduction to HCI,** University of Washington (TA for James Fogarty)
Spring '17	**DES 417: Inclusive Design,** IIT Delhi (co-Instructor with P.V.M. Rao)
'15 – '16	**Professional Scuba Diving Instructor,** MIT Scuba Club & United Divers Boston
Spring '13	**CSL316: Digital Hardware Design,** IIT Delhi (TA for M. Balakrishnan)
Fall '12	**CSP315: Embedded Systems Design,** IIT Delhi (TA for M. Balakrishnan)
'13 – '17	**Global Education & Outreach** (facilitator for two-week design & prototyping workshops)
	India ('13 '14 '15 '16, sponsored by MIT, TechTop, Samsung, ICICI Bank)
	South Africa ('15, sponsored by KwaZulu-Natal)
	Mexico ('16, sponsored by CDC Mexico)
	France ('17, sponsored by École de Management)

Service

2023 – 2024	**Vice President for Accessibility,** ACM SIGCHI
2022 – 2024	**DEI Committee Member,** U-M CSE
2022 – 2024	**Faculty Liaison,** U-M Council for Disability Concerns
2023	**Review Panel,** NSF
2023	**Program Committee Member,** ACM ASSETS 2023
2023	**CoE Representative for External Candidate Evaluation,** U-M
2022	**Program Committee Member,** ACM ASSETS 2022
2022	**Accessibility Co-Chair,** ACM CHI 2022
2021	**Accessibility Co-Chair,** ACM UIST 2021
2021	**Publicity Co-Chair,** ACM ASSETS 2021

2020	**Posters & Demos Co-Chair,** ACM ASSETS 2020
2020	**Program Committee Member,** ACM CHI 2020 LBW
2019	**Accessibility Co-Chair,** ACM ASSETS 2019
2020 –	**Member-at-Large,** HCI4SouthAsia
	An initiative to advance perspectives of South Asian researchers in HCI
2019 – 2022	**Member-at-Large,** AccessSIGCHI
	An advocacy group for making SIGCHI conferences more accessible.
2019	**Design & Web Co-Chair,** ACM UIST 2019
2016 –	**Reviewer,** Nature Electronics '24, CHI '24 '23 '22 '21 '20 '19 '18 '17 '16; UIST '23 '22 '21 '20 '19 '18, '17; ASSETS '24 '23 '22 '21; W4A '23; CSCW '21; TACCESS '21 '20 '18; IEEE VR '20; Mobile HCI '20 '21; ISWC '20; TEI '21; five special recognitions for excellent reviews.

Invited Talks & Panels

Mar 2024	**Advancing Sound Accessibility**
	Invited Talk, University of Rochester
Mar 2024	**Accessible Technology Design**
	Invited Talk, Design Science Program, University of Michigan
Nov 2023	**Research Topics on Accessibility**
	Invited Talk, Introduction to HCI Class, University of Michigan
Aug 2023	**Application Perspectives on ML in Accessibility**
	Invited Talk, Fairness in Datasets for Machine Learning in Accessibility Workshop, Google
Apr 2023	**AI-Assisted Augmented Reality Captioning Approaches to Assist Patients with Hearing Loss**
	Invited Talk, e-Health and Artificial Intelligence, University of Michigan
Mar 2023	**Advancing Sound Accessibility**
	Invited Talk, Center for Disability Health and Wellness, Michigan Medicine
Feb 2023	**XRAccess Community Discussion on Haptics**
	Invited Panelist
	Advancing Sound Accessibility
Nov 2022	Invited Talk, BostonCHI
	Invited Talk, Michigan AI Symposium
Oct 2022	Invited Talk, Introduction to Accessibility Class, University of Michigan
	Advancing Sound Accessibility
Apr 2021	Invited Talk, University of Maryland College Park
	Invited Talk, University of Wisconsin
Mar 2021	Invited Talk, University of Illinois Urbana-Campaign
	Invited Talk, Georgia Institute of Technology
	Invited Talk, New York University
	Invited Talk, University of Colorado-Boulder
	Invited Talk, Carnegie Mellon University
Feb 2021	Invited Talk, University of Michigan
	Invited Talk, The University of Texas at Austin
Jan 2021	Invited Talk, Microsoft Research
Nov 2021	**Sound Accessibility**
	Invited Talk, Introduction to Accessibility Class, University of Michigan
Mar 2021	**SIGCHI EC Panel on Accessibility**
	Invited Panelist

Mar 2021	**Innovations in Sound Sensing & Feedback**
	Invited Talk, Introduction to HCI Class, BITS Pilani
Mar 2021	**Sound Sensing & Feedback Techniques for Deaf & Hard of Hearing People**
	Invited Talk, Introduction to HCI Class, Carnegie Mellon University
Feb 2021	**SoundWatch: Smartwatch-Based Sound Recognition for Deaf & Hard of Hearing People**
	Invited Talk, University of Washington Speech & Hearing Center Seminar
Nov 2020	**Navigating Graduate School with a Disability**
	Invited Talk, HCI Seminar Series, Microsoft Research
Feb 2020	**How is graduate school experience for students with disabilities?**
	Invited Talk, Massachusetts Institute of Technology
Jan 2016	**Applications of Scuba Diving Simulator for the Navy**
	Invited Talk, United States Navy at Boston, Massachusetts
Oct 2017	**DUB Retreat Panel on Accessibility**
	Invited Panelist, University of Washington
Aug 2017	**Inclusive Design**
	Invited Talk, Social Justice & Equity Class, Indian Institute of Technology
Nov 2013	**Innovations in Accessibility for People with Visual Impairment**
	Invited Talk, Microsoft Research

Student Advisees

PhDs	**Xinyun Cao** (U-M), **Jeremy Huang** (U-M), **Alexander Wang** (U-M)
Masters	**Liang-Yuan Wu** (U-M), **Yutong Ren** (U-M), **Emily Tsai** (U-M), **Mansanjan Kaur** (U-M), **Yifan Zhu** (U-M), **Rachel Grossman-Kahn** (UW), **Xu Bin** (UW)
Undergrads	**Hriday Chhabria** (U-M), **Yuni Park** (U-M), **Hanlong Liu** (U-M), **Andy Jin** (U-M), **Reyna Wood** (U-M), **Andrew Dailey** (U-M), **Hang Do** (UW), **Quan Dang** (UW), **Khoa Nguyen** (UW), **Ru Guo** (UW), **Yiru Yang** (UW), **Hung Ngo** (UW), **Justin Chiu** (MIT), **Raymond Wu** (MIT), **Rodrigo Marques** (MIT), **Jingru Guo** (MIT), **Anand Parikh** (MIT), **Kabir Abiose** (MIT), **Brendon Chiu** (MIT), **Eric Manzi** (MIT)
High-Schoolers	**Akli Amrous** (UW), **Angela Carey Lin** (UW)

Dissertation Committee Member

| 2023-2024 | **Jaylin Herskovitz,** University of Michigan |
| 2023-2024 | **Khulood Alkhudaidi,** Worcester Polytechnic Institute |

Selected Press Articles

May 2023	**UMich CSE News,** Dhruv Jain named ACM SIGCHI VP for Accessibility
Feb 2023	**UMich CSE News,** Dhruv Jain earns ACM SIGCHI dissertation award for research on new systems for sound awareness
Jan 2023	**Allen School News,** Allen School alumni Dhruv Jain and Kuikui Liu receive William Chan Memorial Dissertation Awards
Oct 2021	**Allen School News,** Dhruv Jain wins Google Research/CMD-IT LEAP dissertation fellowship for research...
Oct 2021	**Google Blog,** Meet the Ph.D. students changing the face of computing
Aug 2021	**Allen School News,** Dhruv Jain wins Microsoft Research Dissertation Grant for his work leveraging HCI and AI...
Dec 2020	**The Week,** An app that alerts people to sounds (available only in print)
Nov 2020	**Science News,** A smartwatch app alerts users with hearing loss to nearby sounds
Oct 2020	**Forbes,** Smartwatch app notifies deaf and hard of hearing people of sounds
Oct 2020	**New Atlas,** SoundWatch alerts deaf and hard-of-hearing people to important sounds
Oct 2020	**Yahoo News,** Scientists Develop Smartwatch that Alerts Hearing-impaired Persons of Nearby Sounds
Oct 2020	**CNN – News18,** Scientists Develop Smartwatch that Alerts Hearing-impaired Persons of Nearby Sounds

Oct 2020	**E&T Magazine,** Smartwatch app alerts deaf people to everyday sounds
Oct 2020	**Futurity,** Watch App Identifies Sounds for Deaf and Hard-of-Hearing People
Oct 2020	**New Atlas,** SoundWatch alerts deaf and hard-of-hearing people to important sounds
Oct 2020	**Medgadget,** SoundWatch Alerts Deaf Users of Nearby Activity
Oct 2020	**UW News,** SoundWatch: New smartwatch app alerts DHH users to birdsong, sirens and other desired sounds
Nov 2019	**GeekWire,** A smart ring for AR, real-time AI for healthcare, and more UW tech innovations
Nov 2019	**BusinessWire,** Madrona Awards 2019
Nov 2018	**GreekWire,** From fighting Alzheimer's to AR captions, UW CSE students show cutting-edge innovations
Aug 2016	**Quartz,** The invention of the scuba simulator can transform the way humans think about the ocean
May 2016	**Business Insider,** MIT's virtual scuba simulator makes you feel like you are really underwater
Apr 2016	**MIT Tech Review,** Disability-Simulating VR Promotes Empathy
Apr 2016	**ACM TechNews,** Experiencing Underwater Worlds, Virtually
Apr 2016	**BostInno,** VR on Steroids: This 3D Simulator Makes Your Entire Body Feel Like You're Scuba Diving
Apr 2016	**R&D World,** Scuba Dive Without Getting Wet
Apr 2016	**Phys.org,** SCUBA simulator advances VR research while exploring the relationship between diving and disability
Apr 2016	**ECN Mag,** SCUBA simulator advances the field of virtual reality
Apr 2016	**Azo Sensors,** Amphibian SCUBA Diving Simulator Lets Abled People Experience Underwater World
Mar 2016	**MIT News,** Experiencing underwater worlds, virtually
Jul 2015	**MIT News,** Vision for a more accessible MIT campus
Oct 2014	**Metro (UK),** Infrared guidance for the blind (available only in print)
Oct 2014	**New Scientist,** Light beacons let map app talk to blind people
Jan 2014	**Hindustan Times,** A seeing eye app for indoor use
Dec 2013	**Electronics for You,** Roshni - Indoor Navigation System for visually impaired
Jul 2014	**Deccan Herald,** No dearth of avenues
Jun 2013	**Times of India,** Winners of 'QuEST Ingenium 2013' announced
Dec 2012	**Deccan Herald,** Working to beat disability
Apr 2012	**Dainik Bhaskar,** IIT's invention: Blind people will reach their destination without any help
Apr 2012	**Hindustan Times,** A taste of future with students of IIT Delhi
Apr 2012	**Indian Express,** IIT showcases camouflage tech, multiple-user screens
May 2009	**Times of India,** Father helped him with notes, he heard the call
May 2007	**Hindustan Times,** Overcoming odds to reach the top