

Dhruv Jain

University of Michigan, Ann Arbor
Assistant Professor of Computer Science
Assistant Professor of Information
VP for Accessibility, ACM SIGCHI

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

Employment

- 2022 – **University of Michigan, Ann Arbor**
Assistant Professor, Computer Science & Engineering
Assistant Professor, School of Information
Affiliate, School of Medicine
- 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

Selected Awards & Honors



- 2023 **Google Research Scholar Award**
ACM SIGCHI Outstanding Dissertation 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  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. *Communications of the ACM Research Highlights (CACM-RH 2023)* (To Appear)
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  **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-RH 2022)*, 65(6), pp.100-108.

Peer-Reviewed Publications

- 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 **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).
- 14 **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**
- 13  **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**
- 12  **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).
- 11 **Jain, D.**, 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).
- 10 **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**
- 2019  **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).
- 9 **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).
- 8 **Jain, D.**, Findlater, L., Chinh, B., **Jain, D.**, Froehlich, J., Kushalnagar, R. and Lin, A.C., 2019, May. Deaf and Hard-of-Hearing Individuals' 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).
- 7 **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).
- 2018 **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).
- 2016 **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).
- 4 **Jain, D.**, 2014, October. Path-Guided Indoor Navigation for the Visually impaired Using Minimal Building Retrofitting. In *Proceedings of the 16th international ACM SIGACCESS conference on Computers & accessibility (ASSETS 2014)* (pp. 225-232).
- 2014 **Jain, D.**, 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).
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- 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

- 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)* (pp. 1-2). IEEE.

Workshop and SIG Organization

- 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

- 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 \(3000+ downloads\)](#)
- 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

- 2023 **Google Research Scholar Award**
PI; Google; \$60,000
- Summer Student Support**
Co-PI; E-Health and Artificial Intelligence at U-M; \$12,000
- 2022 **LEAP Conference 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 Grant; \$1,600
- 2014 - 2016 **Indoor Navigation System for the Visually Impaired Using Minimal Building Retrofitting**
Co-PI; Samsung University Relations Award; INR 1,200,000

Teaching

- Fall '23 **CSE 598: Advanced Accessibility**, University of Michigan
- Winter '23 **CSE 498: Accessibility Studio**, 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	CSSL316: 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 –	Vice President for Accessibility , ACM SIGCHI
2023	Review Panel , NSF
2023	Program Committee Member , ACM ASSETS 2023
2023	CoE Representative for External Candidate Evaluation , U-M
2022 – 2023	DEI Committee Member , U-M CSE
2022 – 2023	Faculty Liaison , U-M Council for Disability Concerns
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 , CHI '23 '22 '21 '20 '19 '18 '17 '16; UIST '22 '21 '20 '19 '18, '17; ASSETS '23 '22 '21; W4A '23; CSCW '21; TACCESS '21 '20 '18; IEEE VR '20; Mobile HCI '20 '21; ISWC '20; TEI '21; four special recognitions for excellent reviews.

Invited Talks & Panels

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
Nov 2022	Advancing Sound Accessibility 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), Rue-Chei Chang (U-M), Xinyue Chen (U-M)
Masters	Emily Tsai (U-M), Mansanjan Kaur (U-M), Yifan Zhu (U-M), Rachel Grossman-Kahn (UW), Xu Bin (UW)
Undergrads	Hriday Chhabria (U-M), Reyna Wood (U-M), Andy Jin (U-M), Yuni Park (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)

Selected Press Articles

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](#)