DANNA GURARI

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RESEARCH INTERESTS

Computer vision, machine learning, accessibility, medical image analysis, hybrid human-machine partnerships

PROFESSIONAL APPOINTMENTS

Assistant Professor 2021 - Present
Computer Science, University of Colorado Boulder

Research Fellow 2021 - Present
School of Information, University of Texas at Austin

Assistant Professor 2017 - 2021
School of Information, University of Texas at Austin
Related Appointments: Faculty Affiliate for Texas Aging and Longevity Center (since 2019), Graduate Studies Committee (GSC) for Department of Computer Science (since 2018)

Postdoctoral Fellow 2015 - 2017
Computer Science, University of Texas at Austin
Advisor: Dr. Kristen Grauman

Boulder Imaging 2007 - 2010
Software Developer, Project Manager, and Education Lead

Raytheon 2005 - 2007
Software Engineer

EDUCATION

Ph.D., Computer Science 2010 - 2015
Boston University; Advisor: Dr. Margrit Betke

M.S., Computer Science 2004 - 2005
Washington University in St. Louis; Advisor: Dr. William D. Richard

B.S., Biomedical Engineering Major and Philosophy Minor 2000 - 2005
Washington University in St. Louis

HONORS AND AWARDS

Best in Physics Award and Innovations in Medical Physics Award 2024
- Presentation [TP38]: Annual Conference for the American Association of Physics in Medicine (AAPM)

Best in Physics Award 2023
- Presentation [TP32]: Annual Conference for the American Association of Physics in Medicine (AAPM)

Best Paper Honorable Mention 2020
- Publication [J4]: ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW)

SIG-USE Innovation Award 2020
- Publication [C24]: Association for Information Science and Technology (ASIS&T)

Civic Futures Award: Designing for the 100% 2019
- Recognition for government and education employees in Central Texas who are shaping the future

Best Paper Honorable Mention 2017
- Publication [C9]: ACM Conference on Human Factors in Computing Systems (CHI)

Best Paper Runner-Up Award 2016
- Publication [W7]: AAAI Conference on Human Computation & Crowdsourcing (HCOMP): Workshop on Human Computation for Image and Video Analysis

Researcher Excellence Award 2015
- Annual award for selected Ph.D. students in Boston University's computer science department

Best Paper Award: Innovative Idea 2014
- Publication [W3]: Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI): Interactive Medical Image Computation (IMIC) Workshop

Best Paper Award 2013
- Publication [W1]: Workshop on Applications in Computer Vision (WACV)

Ford Foundation Fellowship Honorable Mention 2011

FUNDING

Research

National Science Foundation CISE REU Student Funding 2026 - 2027
Accounting for Focus Ambiguity in Visual Questions
PI: Danna Gurari
Amount: $10,000

University of Colorado Research & Innovation Seed Grant 2026 - 2027
Vision Canceling Technologies for Individuals with Traumatic Brain Injuries
PI: Danna Gurari (with Dr. Jeffrey Hebert)
Amount: $60,000 (Total: $60,000)

National Science Foundation IIS Grant 2516628 2025 - 2027
Accounting for Focus Ambiguity in Visual Questions
PI: Danna Gurari (with Co-PI Dr. Anhong Guo)
Amount: $285,000 (Total: $500,000)

Adobe Research 2025
Amount: $10,000

University of Colorado Coleman Institute for Cognitive Disabilities 2024 - 2025
Vision Canceling Technologies for Individuals with Traumatic Brain Injuries
PI: Danna Gurari (with Dr. Jeffrey Hebert)
Amount: $50,000 (Total: $50,000)

Adobe Research 2024
Amount: $25,000

University of Colorado Cancer Center, Investigator Initiated Trials 2023

Computer Vision Enhanced Breast DIBH-RT
Co-PI: Danna Gurari (with Dr. David Thomas)
Amount: $70,000 (Total: $100,000)

Adobe Research 2023
Amount: $20,000

Wings of Hope for Pancreatic Research / CU Anschutz Cancer Center 2023
Computer Vision Assisted Alignment for Pancreatic Stereotactic Body Radiation Therapy (SBRT)
Co-PI: Danna Gurari (with Dr. David Thomas)
Amount: $50,000 (Total: $50,000, with CU Anschutz matching Wings of Hope gift)

Adobe Research 2022
Amount: $15,000

Microsoft AI4A 2021 - 2022
Efficient Computer Vision Designed for People With Vision Impairments
PI: Danna Gurari
Amount: $25,000 (Azure computing credit)

National Science Foundation SaTC Grant 2148080 2021 - 2025
Novel Algorithms and Tools for Empowering People Who Are Blind to Safeguard Private Visual Content
PI: Danna Gurari (with Co-PIs Dr. Leah Findlater and Dr. Yang Wang)
Amount: $567,706 (Total: $1,199,993)

Amazon Mechanical Turk 2021
Amount: $8,640 (credit to cover Amazon Mechanical Turk fees)

Microsoft AI4A 2021
Optimizing the Visual Experiences of the Visually Impaired on Social Media
PI: Danna Gurari
Amount: $20,000 (Azure computing credit)

University of Texas at Austin, Institute for Foundations of Machine Learning 2021
Optimizing the Visual Experiences of the Visually Impaired on Social Media
Co-PI: Danna Gurari (with PI Dr. Alan Bovik)
Amount: $67,342 (Total: $67,342)

Microsoft AI4A 2020 - 2021
Seeing UI Data Set Creation
PI: Danna Gurari
Amount: $50,000

University of Texas at Austin, Good Systems 2020 - 2021
ML4GIS: Developing and Evaluating Computer Vision Methods to Enhance Access to Geospatial Data in Large Historical Map Collections
PI: Danna Gurari (with Co-PIs Aaron Choate and Michael Shensky)
Amount: $29,831 (Total: $40,000)

Adobe Research 2020
Amount: $14,000

University of Texas at Austin, Good Systems 2019 - 2020
Privacy Preferences and Values for Computer Vision Applications
PI: Danna Gurari (with Co-PIs Kenneth R. Fleischmann and Bo Xie)
Amount: $32,779 (Total: $99,966)

Microsoft AI4A 2019 - 2020
Technologies that Serve the Needs of People Who Are Blind Or With Low Vision
PI: Danna Gurari
Amount: $150,000

Microsoft Ability Initiative (MAI) 2019 - 2020
Technologies that Serve the Needs of People Who Are Blind Or With Low Vision
PI: Danna Gurari (with Co-PI Kenneth R. Fleischmann)
Amount: $236,092 (Total: $300,000)

Adobe Research 2019
Amount: $17,000

National Science Foundation IIS CRII Grant 1755593 2018 - 2021
Predicting When, Why, and How Multiple People Will Disagree When Answering a Visual Question
PI: Danna Gurari
Amount: $174,947

Silicon Valley Community Foundation Chan Zuckerberg Initiative Grant 2018 - 2020
Video Analysis: Efficiently Tracking and Detecting Life Cycle Phase Transitions for Live Cells
PI: Danna Gurari
Amount: Cannot disclose publicly

Microsoft AI4A: AI for Accessibility Grantee Summit 2019
PI: Danna Gurari
Amount: ∼$3,000 (fully-supported travel grant for two people)

Microsoft Faculty Summit 2019
PI: Danna Gurari
Amount: ∼$1,500 (fully-supported travel grant)

Amazon Mechanical Turk 2019
Amount: $5,405 (credit to cover Amazon Mechanical Turk fees)

SAP Sponsorship 2018
Amount: $2,764 (fully-supported travel grant)

Adobe Research 2017 - 2018
Amount: $36,000

Service

Apple Gift 2026

Amount: Cannot disclose publicly (support for CVPR 2026 VizWiz Grand Challenge workshop)

Apple Gift 2025
Amount: Cannot disclose publicly (support for CVPR 2025 VizWiz Grand Challenge workshop)

Apple Gift 2024
Amount: Cannot disclose publicly (support for CVPR 2024 VizWiz Grand Challenge workshop)

Apple Gift 2023
Amount: Cannot disclose publicly (support for CVPR 2023 VizWiz Grand Challenge workshop)

Apple Gift 2022
Amount: Cannot disclose publicly (support for CVPR 2022 VizWiz Grand Challenge workshop)

SIGACCESS Gift 2022
Amount: $5,000 (support for CVPR 2022 VizWiz Grand Challenge workshop)

Microsoft Azure Workshop Grant 2022
Amount: $30,000 (computing credit for CVPR 2022 VizWiz Grand Challenge workshop)

Microsoft Azure Workshop Grant 2021
Amount: $30,000 (computing credit for CVPR 2021 VizWiz Grand Challenge workshop)

Microsoft Azure Workshop Grant 2020
Amount: $30,000 (computing credit for CVPR 2020 VizWiz Grand Challenge workshop)

Google Cloud Platform Workshop Grant 2020
Amount: $10,000 (computing credit for CVPR 2020 Visual Question Answering & Dialog workshop)

Lorentz e-Science Competition 2018
Crowdsourcing for Medical Image Analysis Workshop
Amount: €15,000 (∼$17,500) + fully-supported international travel grant (∼$3,000)

Evolv Technology Gift 2016
Amount: $1,700 (support for HCOMP 2016 GroupSight workshop)

Teaching

NSF Jetstream 2 2024 - 2026
Amount: ∼$170,000 (computing credits)

Google Cloud Education Grants 2022 - 2026
Amount: $38,900 (computing credits)

Microsoft Azure Curriculum Grants 2018 - 2022
Amount: $65,000 (computing credits)

PUBLICATIONS

Google scholar profile hyperlink
- *Authors with names underlined are individuals I advised or mentored.*

- Equal authorship is denoted with an asterisk (*).
- Author ordering has lead authors (typically students) listed in order of descending contribution (e.g., first author is the lead author) while the last author is the senior author.

Peer-Reviewed Journal Publications

[J9] Maniratnam Mandal, Deepti Ghadiyaram, **Danna Gurari**, and Alan Bovik. "Helping Visually Impaired People Take Better Quality Pictures." *IEEE Transactions on Image Processing (T-IP)*, 11 pages, 2023.

[J8] Abigale Stangl, Kristina Shiroma, Nathan Davis, Bo Xie, Kenneth R. Fleischmann, Leah Findlater, and **Danna Gurari**. "Privacy Concerns for Visual Assistance Technologies." *ACM Transactions on Accessible Computing*, 41 pages, 2022.

[J7] Samreen Anjum, Ambika Verma, Brandon Dang, and **Danna Gurari**. "Exploring the Use of Deep Learning with Crowdsourcing to Annotate Images." *Human Computation Journal*, 21 pages, 2021.

[J6] Jakki O. Bailey, Barkha Patel, and **Danna Gurari**. "A Perspective on Building Ethical Datasets for Children's Conversational Agents" *Frontiers in Artificial Intelligence*, 34 pages, 2021.

[J5] Samreen Anjum, Chi Lin, and **Danna Gurari**. "CrowdMOT: Crowdsourcing Strategies for Tracking Multiple Objects in Videos." *Proceedings of the ACM on Human Computer Interaction (PACM HCI)*, 25 pages, 2021.

[J4] Xiaoyu Zeng, Yanan Wang, Tai-Yin Chiu, Nilavra Bhattacharya, and **Danna Gurari**. "Vision Skills Needed to Answer Visual Questions." *Proceedings of the ACM on Human Computer Interaction (PACM HCI)*, 31 pages, 2020. **Best Paper Honorable Mention Award: 22 awardees from 1,000+ submitted papers across the 3 CSCW 2020 cycles.**

[J3] Rachel N. Simons, **Danna Gurari**, and Kenneth R. Fleischmann. "'I Hope This Is Helpful': Understanding Crowdworkers' Challenges and Motivations for an Image Description Task." *Proceedings of the ACM on Human Computer Interaction (PACM HCI)*, 26 pages, 2020.

[J2] **Danna Gurari**, Yinan Zhao, Suyog Dutt Jain, Margrit Betke, and Kristen Grauman. "Predicting How to Distribute Work Between Algorithms and Humans to Segment an Image Batch." *International Journal of Computer Vision (IJCV)*, 19 pages, March 2019. **(2016 impact factor = 8.2)**

[J1] **Danna Gurari**, Kun He, Bo Xiong, Jianming Zhang, Mehrnoosh Sameki, Suyog Dutt Jain, Stan Sclaroff, Margrit Betke, and Kristen Grauman. "Predicting Foreground Object Ambiguity and Efficiently Crowdsourcing the Segmentation(s)." *International Journal of Computer Vision (IJCV)*, 24 pages, January 2018. **(2016 impact factor = 8.2)**

Peer-Reviewed Conference Publications

[C46] Neelima Prasad, Jarek Reynods, Neel Karsanbhai, Tanusree Sharma, Lotus Zhang, Abigale Stangl, Yang Wang, Leah Findlater, and **Danna Gurari**. "Hierarchical Instance Tracking to Balance Privacy Preservation with Accessible Information." *IEEE/CVF Winter Conference on Applications in Computer Vision (WACV)*, 15 pages, March 2026. **(85/1,329 = 6% acceptance rate for round 1 submissions)**

[C45] Chongyan Chen*, Yu-Yun Tseng*, Zhuoheng Li, Anush Kumar Venkatesh, and **Danna Gurari**. "Acknowledging Focus Ambiguity in Visual Questions." *IEEE International Conference on Computer Vision (ICCV)*, 11 pages, October 2025. **(2,698/11,239 = 24% acceptance rate)**

[C44] Tanusree Sharma, Yu-Yun Tseng, Lotus Zhang, Ayae Ide, Kelly Avery Mack, Leah Findlater, **Danna Gurari**, and Yang Wang. "'Before, I Asked My Mom, Now I Ask ChatGPT': Visual Privacy Management with Generative AI for Blind and Low-Vision People." *ACM SIGACCESS Conference on Computers and Accessibility (ASSETS)*, 21 pages, October 2025. **(83/279=29.7% acceptance rate)**

[C43] Yu-Yun Tseng, Tanusree Sharma, Lotus Zhang, Abigale Stangl, Leah Findlater, Yang Wang, and **Danna Gurari**. "BIV-Priv-Seg: Locating Private Content in Images Taken by People With Visual Impairments." *IEEE/CVF Winter Conference on Applications in Computer Vision (WACV)*, 15 pages, March 2025. **Oral Presentation: top ∼8% (i.e., 203) from 2,458 submitted papers.**

[C42] Mina Huh, Fangyuan Xu, Yi-Hao Peng, Chongyan Chen, Hansika Murugu, **Danna Gurari**, Eunsol Choi, and Amy Pavel. "Long-form Answers to Visual Questions Asked by Blind and Low Vision People." *Conference on Language Modeling (COLM)*, 9 pages, October 2024. **Oral Presentation: top ∼2% (i.e., 22) from 1,036 submitted papers.**

[C41] Chongyan Chen, Mengchen Liu, Noel Codella, Yunsheng Li, Lu Yuan, and **Danna Gurari**. "Fully Authentic Visual Question Answering Dataset from Online Communities." *European Conference on Computer Vision (ECCV)*, 14 pages, October 2024. **(2,395/8,585 = 27.9% acceptance rate)**

[C40] Josh Myers-Dean, Jarek Reynolds, Brian Price, Yifei Fan, and **Danna Gurari**. "SPIN: Hierarchical Segmentation with Subpart Granularity in Natural Images." *European Conference on Computer Vision (ECCV)*, 14 pages, October 2024. **(2,395/8,585 = 27.9% acceptance rate)**

[C39] Lotus Zhang, Abigale Stangl, Tanusree Sharma, Yu-Yun Tseng, Inan Xu, **Danna Gurari**, Yang Wang, and Leah Findlater. "Designing Accessible Obfuscation Support for Blind Individuals Visual Privacy Management." *ACM Conference on Human Factors in Computing Systems (CHI)*, 27 pages, April 2024. **(1,060/4,028 = 26% acceptance rate)**

[C38] Josh Myers-Dean, Yifei Fan, Brian Price, Wilson Chan, and **Danna Gurari**. "Interactive Segmentation for Diverse Gesture Types Without Context." *IEEE Winter Conference on Applications in Computer Vision (WACV)*, 10 pages, January 2024. **(847/2,042 = 41% acceptance rate)**

[C37] Jarek Reynolds*, Chandra Kanth Nagesh*, and **Danna Gurari**. "Salient Object Detection for Images Taken by People With Vision Impairments." *IEEE Winter Conference on Applications in Computer Vision (WACV)*, 10 pages, January 2024. **(847/2,042 = 41% acceptance rate)**

[C36] Chongyan Chen, Samreen Anjum, and **Danna Gurari**. "VQA Therapy: Exploring Answer Differences by Visually Grounding Answers." *IEEE International Conference on Computer Vision (ICCV)*, 10 pages, October 2023. **(2,160/8,260 = 26% acceptance rate)**

[C35] Zhuohao Zhang, Smirity Kaushik, JooYoung Seo, Haolin Yuan, Sauvik Das, Leah Findlater, **Danna Gurari**, Abigale Stangl, and Yang Wang."ImageAlly: A Human-AI Hybrid Approach to Support Blind People in Detecting and Redacting Private Image Content." *The Symposium on Usable Privacy and Security (SOUPS)*, 20 pages, August 2023. **(33/147 = 22% acceptance rate)**

[C34] Reza Akbarian Bafghi and **Danna Gurari**. "A New Dataset Based on Images Taken by Blind People for Testing the Robustness of Image Classification Models Trained for ImageNet Categories." *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 10 pages, June 2023. **(2,359/9,155 = 26% acceptance rate)**

[C33] Abigale Stangl, Emma Sadjo, Pardis Emami-Naeini, Yang Wang, **Danna Gurari**, and Leah Findlater. "'Dump it, Destroy it, Send it to Data Heaven': Blind People's Expectations for Visual Privacy in Visual Assistance Technologies." *International Web for All Conference (W4A)*, 10 pages, May 2023. **(16/32 = 50% acceptance rate)**

[C32] Tanusree Sharma, Abigale Stangl, Lotus Zhang, Yu-Yun Tseng, Inan Xu, Leah Findlater, **Danna Gurari**, and Yang Wang. "Disability-First Design and Creation of A Dataset Showing Private Visual Information Collected With People Who Are Blind." *ACM Conference on Human Factors in Computing Systems (CHI)*, 19 pages, April 2023. **(880/3,182 =28% acceptance rate)**

[C31] Tai-Yin Chiu and **Danna Gurari**. "Line Search-Based Feature Transformation for Fast, Stable, and

Tunable Content-Style Control in Photorealistic Style Transfer." *IEEE Winter Conference on Applications in Computer Vision (WACV)*, 10 pages, January 2023. **(641/1,577=41% acceptance rate)**

[C30] Yu-Yun Tseng*, Alexander Bell*, and **Danna Gurari**. "VizWiz-FewShot: Locating Objects in Images Taken by People With Visual Impairments." *European Conference on Computer Vision (ECCV)*, 16 pages, October 2022. **(1650/5,803=28% acceptance rate)**

[C29] Chongyan Chen, Samreen Anjum, and **Danna Gurari**. "Grounding Answers for Visual Questions Asked by Visually Impaired People." *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 10 pages, June 2022. **Oral Presentation: top ∼4% (i.e., 344) from 8161 submitted papers.**

[C28] Tai-Yin Chiu and **Danna Gurari**. "PCA-Based Knowledge Distillation Towards Lightweight and Content-Style Balanced Photorealistic Style Transfer Models." *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 10 pages, June 2022. **(2,067/8,161=25.3% acceptance rate)**

[C27] Tai-Yin Chiu and **Danna Gurari**. "PhotoWCT^2: Compact Autoencoder for Photorealistic Style Transfer Resulting from Blockwise Training and Skip Connections of High-Frequency Residuals." *IEEE Winter Conference on Applications in Computer Vision (WACV)*, 10 pages, January 2022. **(35% acceptance rate)**

[C26] Abigale Stangl, Nitin Verma, Kenneth R. Fleischmann, Meredith R. Morris, and **Danna Gurari**. "Going Beyond One-Size-Fits-All Image Descriptions to Satisfy the Information Wants of People Who are Blind or Have Low Vision." *ACM SIGACCESS Conference on Computers and Accessibility (ASSETS)*, 23 pages, October 2021. **(36/124=29% acceptance rate)**

[C25] Abigale Stangl, Kristina Shiroma, Bo Xie, Kenneth R. Fleischmann, and **Danna Gurari**. "Visual Content Considered Private by People Who Are Blind." *ACM SIGACCESS Conference on Computers and Accessibility (ASSETS)*, 20 pages, October 2020. **(46/167=27.5% acceptance rate)**

[C24] Nathan Davis, **Danna Gurari**, and Bo Xie. "Quality of Images Showing Medication Packaging from Individuals with Vision Impairments: Implications for the Design of Visual Question Answering Applications." *Association for Information Science and Technology (ASIS&T)*, 18 pages, October 2020. **(SIG-USE Innovation Award. 54% acceptance rate.)**

[C23] Tai-Yin Chiu and **Danna Gurari**. "Iterative Feature Transformation for Fast and Versatile Universal Style Transfer." *European Conference on Computer Vision (ECCV)*, 16 pages, August 2020. **(1,361/5,025=27.1% acceptance rate)**

[C22] **Danna Gurari**, Yinan Zhao, Meng Zhang, and Nilavra Bhattacharya. "Captioning Images Taken by People Who Are Blind." *European Conference on Computer Vision (ECCV)*, 18 pages, August 2020. **(1361/5,025=27.1% acceptance rate)**

[C21] Tai-Yin Chiu, Yinan Zhao, and **Danna Gurari**. "Assessing Image Quality Issues for Real-World Problems." *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 11 pages, June 2020. **(1,470/6,656=22% acceptance rate)**

[C20] Abigale Stangl, Meredith Morris, and **Danna Gurari**. "'Person, Shoes, Tree. Is the Person Naked?' What People with Vision Impairments Want in Image Descriptions." *ACM Conference on Human Factors in Computing Systems (CHI)*, 13 pages, April 2020. **(769/3,126=24.3% acceptance rate)**

[C19] Yinan Zhao, Brian Price, Scott Cohen, and **Danna Gurari**. "Unconstrained Foreground Object Search." *IEEE International Conference on Computer Vision (ICCV)*, 10 pages, October 2019. **(1077/4,303=25% acceptance rate)**

[C18] Nilavra Bhattacharya, Qing Li, and **Danna Gurari**. "Why Does a Visual Question Have Different Answers?" *IEEE International Conference on Computer Vision (ICCV)*, 10 pages, October 2019. **(1,077/4,303=25% acceptance rate)**

[C17] Anubrata Das, Samreen Anjum, and **Danna Gurari**. "Dataset Bias: Predicting and Understanding the Implications for Visual Question Answering" *Association for Information Science and Technology (ASIS&T)*, 10 pages, October 2019.

[C16] **Danna Gurari**, Qing Li, Chi Lin, Yinan Zhao, Anhong Guo, Abigale Stangl, and Jeffrey Bigham. "VizWiz-Priv: A Dataset for Recognizing the Presence and Purpose of Private Visual Information in Images Taken by Blind People." *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 10 pages, June 2019. **(1,300/5,165=25.2% acceptance rate)**

[C15] Yinan Zhao, Brian Price, Scott Cohen, and **Danna Gurari**. "Guided Image Inpainting: Replacing an Image Region by Pulling Content from Another Image." *IEEE Winter Conference on Applications in Computer Vision (WACV)*, 11 pages, January 2019. **(286/772=37% acceptance rate)**

[C14] Aimee Yun-Fang Lin, Shelley Shwu-Ching Young, Harrison Pang-Sheng Lai, and **Danna Gurari**. "A Preliminary Study on Color and Grayscale Images for Object Recognition and Scene Classification Tasks on Amazon Mechanical Turk Crowdsourcing Platform." *International Conference on Human Systems Engineering and Design (IHSED)*, 5 pages, October 2018.

[C13] Abigale Stangl, Esha Kothari, Suyog Dutt Jain, Tom Yeh, Kristen Grauman, and **Danna Gurari**. "BrowseWithMe: Design and Prototype of an Online Clothes Shopping Assistant for People with Visual Impairments." *ACM SIGACCESS Conference on Computers and Accessibility (ASSETS)*, 12 pages, October 2018. **(26% acceptance rate)**

[C12] Chun-Ju Yang, Kristen Grauman, and **Danna Gurari**. "Visual Question Answer Diversity." *AAAI Conference on Human Computation & Crowdsourcing (HCOMP)*, 9 pages, July 2018. **(29% acceptance rate)**

[C11] **Danna Gurari**, Qing Li, Abigale Stangl, Anhong Guo, Chi Lin, Jiebo Luo, Kristen Grauman, and Jeffrey P. Bigham. "VizWiz Grand Challenge: Answering Visual Questions from Blind People." *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 10 pages, June 2018. **Spotlight Presentation: top 9% from 3,309 submitted papers.**

[C10] Mehrnoosh Sameki, Tianyi Zhang, Linli Ding, Margrit Betke, and **Danna Gurari**. "Crowd-O-Meter: Predicting if a Person is Vulnerable to Believe Political Claims." *AAAI Conference on Human Computation & Crowdsourcing (HCOMP)*, 10 pages, October 2017. **(28.9% acceptance rate)**

[C9] **Danna Gurari** and Kristen Grauman. "CrowdVerge: Predicting If People Will Agree on the Answer to a Visual Question." *ACM Conference on Human Factors in Computing Systems (CHI)*, 12 pages, May 2017. **Best Paper Honorable Mention Award: top 5% from 2,400+ submitted papers.**

[C8] **Danna Gurari**, Mehrnoosh Sameki, and Margrit Betke. "Investigating the Influence of Data Familiarity to Improve the Design of a Crowdsourcing Image Annotation System." *AAAI Conference on Human Computation & Crowdsourcing (HCOMP)*, 10 pages, November 2016. **(30.3% acceptance rate)**

[C7] **Danna Gurari**, Suyog Dutt Jain, Margrit Betke, and Kristen Grauman. "Pull the Plug? Predicting If Computers or Humans Should Segment Images." *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 10 pages, June 2016. **(29.9% acceptance rate)**

[C6] Mehrnoosh Sameki, **Danna Gurari**, and Margrit Betke. "Predicting the Quality of Crowdsourced Image Drawings from Crowd Behavior." *AAAI Conference on Human Computation & Crowdsourcing (HCOMP)*, 2 pages, November 2015.

[C5] Mehrnoosh Sameki, **Danna Gurari**, and Margrit Betke. "Characterizing Image Segmentation Behavior of the Crowd." *Collective Intelligence*, 4 pages, June 2015.

[C4] **Danna Gurari**, Diane Theriault, Mehrnoosh Sameki, Brett Isenberg, Tuan A. Pham, Alberto Purwada, Patricia Solski, Matthew Walker, Chentian Zhang, Joyce Y. Wong, and Margrit Betke. "How to Collect

Segmentations for Biomedical Images? A Benchmark Evaluating the Performance of Experts, Crowdsourced Non-Experts, and Algorithms." *IEEE Winter Conference on Applications in Computer Vision (WACV)*, 8 pages, 2015. **(36.7% acceptance rate)**

[C3] Seule Ki Kim, **Danna Gurari**, Chian Yang, Christopher D. Hartman, Matthew Jacobsen, Joyce Y. Wong, and Margrit Betke. "I'mCell: A Touch Pad Tool for Annotating Cell Images." *Biomedical Signal Analysis (BSA): 3-D Imaging in Medicine*, Florianopolis, Brazil, 3 pages, 2014.

[C2] Zheng Wu, **Danna Gurari**, Joyce Y. Wong, and Margrit Betke. "Hierarchical Partial Matching and Segmentation of Interacting Cells." *Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI)*, 8 pages, 2012. **(32% acceptance rate)**

[C1] Byunghyung Kim, **Danna Gurari**, Hough O'Donnell, and Margrit Betke. "Interactive Art System for Multiple Users Based on Tracking Hand Movements." *IADIS International Conference Interfaces and Human Computer Interaction (IHCI)*, 8 pages, 2011.

Peer-Reviewed Workshop Publications

[W17] Everley Tseng and **Danna Gurari**. "Focus Ambiguity in Visual Questions: A Disambiguation Problem, Not Instance Segmentation." *CVPR Workshop on Multimodal Algorithmic Reasoning (MAR)*, 8 pages, June 2026.

[W16] Atharva Peshkar, David Thomas, Willem Schreuder, Sarah Milgrom, and **Danna Gurari**. "Improving Radiation Therapy with Personalized Skeletal Models." *CVPR Workshop on Bridging AI and Medical Reality: Computer Vision for Real-world Clinical Translation (CV4CLINIC)*, 8 pages, June 2026.

[W15] Nicholas Cooper, Lijun Chen, Sailesh Dwivedy, and **Danna Gurari**. "Logit-Based Losses Limit the Effectiveness of Feature Knowledge Distillation." *NeurIPS Workshop on Symmetry and Geometry in Neural Representations (NeurReps)*, 9 pages, December 2025.

[W14] Josh Myers-Dean, Kangning Liu, Brian Price, Yifei Fan, and **Danna Gurari**. "conSAMmé: Achieving Consistent Segmentations with SAM." *CVPR Workshop on New Trends in Image Restoration and Enhancement (NTIRE)*, 10 pages, June 2025.

[W13] Josh Myers-Dean, Brian Price, Yifei Fan, and **Danna Gurari**. "Hierarchical Semantic Segmentation with Autoregressive Language Modeling." *CVPR Workshop on Pixel-level Vision Foundation Models (PixFoundation)*, 11 pages, June 2025.

[W12] Mo Zhou*, Josh Myers-Dean*, and **Danna Gurari**. "PartStickers: Generating Parts of Objects for Rapid Prototyping." *CVPR Workshop on AI for Creative Visual Content Generation Editing and Understanding (CVEU)*, 11 pages, June 2025.

[W11] Stuti Pandey, Josh Myers-Dean, Jarek Reynolds, and **Danna Gurari**. "Interpreting COVID Lateral Flow Tests' Results with Foundation Models." *CVPR Workshop on Domain adaptation, Explainability, Fairness in AI for Medical Image Analysis (DEF-AI-MIA)*, 8 pages, June 2024.

[W10] Samreen Anjum and **Danna Gurari**. "CTMC: Cell Tracking with Mitosis Detection Dataset Challenge." *CVPR Computer Vision for Microscopy Image Analysis (CVMI) Workshop*, 9 pages, June 2020.

[W9] Abigale Stangl and **Danna Gurari**. "Towards Technologies that Mitigate Private Visual Information Disclosure by People who are Blind or Have Low Vision." *CHI Networked Privacy Workshop*, 4 pages, April 2020.

[W8] Anuparna Banerjee, Samridhi Ojha, and **Danna Gurari**. "Let's Agree to Disagree: A Meta-Analysis of Disagreement Among Crowd Workers During Visual Question Answering." *AAAI HCOMP Workshop on Human Computation for Image and Video Analysis (GroupSight)*, 4 pages, October 2017.

[W7] Mehrnoosh Sameki, Mattia Gentil, **Danna Gurari**, Elham Saraee, Erik Hasenberg, Joyce Y. Wong and Margrit Betke. "CrowdTrack: Interactive Tracking of Cells in Microscopy Image Sequences with Crowdsourcing Support." *AAAI HCOMP Workshop on Human Computation for Image and Video Analysis (GroupSight)*, 4 pages, 2016. **Best Paper Runner-Up Award: selected by steering committee from anonymized papers**.

[W6] **Danna Gurari**, Mehrnoosh Sameki, Zheng Wu and Margrit Betke. "Mixing Crowd and Algorithm Efforts to Segment Objects in Biomedical Images." *MICCAI Interactive Medical Image Computation Workshop (IMIC)*, 8 pages, 2016.

[W5] Mattia Gentil, Mehrnoosh Sameki, **Danna Gurari**, Elham Saraee, Erik Hasenberg, Joyce Y. Wong, and Margrit Betke. "Interactive Tracking of Cells in Microscopy Image Sequences." *MICCAI Interactive Medical Image Computation Workshop (IMIC)*, 10 pages, 2016.

[W4] Mehrnoosh Sameki, **Danna Gurari**, and Margrit Betke. "ICORD: Intelligent Collection of Redundant Data? A Dynamic System for Crowdsourcing Cell Segmentations Accurately and Efficiently." *CVPR Computer Vision for Microscopy Image Analysis (CVMI) Workshop*, 10 pages, June 2016.

[W3] **Danna Gurari**, Diane Theriault, Mehrnoosh Sameki, and Margrit Betke. "How to Use Level Set Methods to Accurately Find Boundaries of Cells in Biomedical Images? Evaluation of Six Methods Paired with Automated and Crowdsourced Initial Contours." *MICCAI Interactive Medical Image Computation Workshop (IMIC)*, 9 pages, 2014. **Best Paper Award for Innovative Idea.**

[W2] **Danna Gurari**, Diane Theriault, and Margrit Betke. "Informed Segmentation: A Framework for Using Context to Select an Algorithm and a Case Study Using Humans in the Loop." *MICCAI Interactive Medical Image Computation Workshop (IMIC)*, 9 pages, 2014.

[W1] **Danna Gurari**, Seule Ki Kim, Eugene Yang, Brett Eisenberg, Tuan A. Pham, Alberto Purwada, Patricia Solski, Matthew Walker, Joyce Y. Wong, and Margrit Betke. "SAGE: An Approach and Implementation Empowering Quick and Reliable Quantitative Analysis of Segmentation Quality." *IEEE Workshop on Applications in Computer Vision (WACV)*, pp. 475-481, 2013. **Best Paper Award: 2 awardees from 161 submitted papers.**

Dissertation and Thesis

[T2] **Danna Gurari**. Combining Crowd Worker, Algorithm, and Expert Efforts to Find Boundaries of Objects in Images. *PhD Dissertation*, Boston University Department of Computer Science, July 2015.

[T1] **Danna Gurari**. Harmonic Imaging Using a Mechanical Sector, B-Mode Ultrasound System. *Master's Thesis*, Washington University Department of Computer Science, August 2005.

PATENTS

Systems and Methods for Stereotactic Guided Radiation Therapy Using Computer Vision Systems for Patient Specific Body Models
Status: Pending, Application No: PCT/US2024/028777, Filed: May 10, 2024
Role: Co-inventor

PRESENTATIONS

- Authors with names underlined are individuals I advised or mentored.
- I gave the presentation in all cases except when there is a list of authors.

Invited Technical Oral Presentations (excludes conference/workshop publication presentations)

[TP48] **University of Colorado Boulder**, Department of Information Science, "How Improving AI for Blind People Sparks Innovations that Benefit the Broader Community of AI Users." Boulder, Colorado, November 5, 2025.

[TP47] **ACM SIGACCESS Conference on Computers and Accessibility (ASSETS)**, "The Accessibility, Security, and Privacy Nexus: Trends and Opportunities." Kelly Avery Mack, Yu-Jie Chen, Lotus Zhang, **Danna Gurari**, Tanusree Sharma, Yang Wang, and Leah Findlater. Denver, Colorado, October, 2025. **(82/124=66.1% acceptance rate)**

[TP46] **Boulder Meadows Library**, "The AI Landscape: Present Realities and Future Directions." Boulder, Colorado, October 15, 2025.

[TP45] **University of Colorado Boulder**, Computer Science Department, "Designing AI to Empower People: Datasets, Collaborations, and Efficient Models." Boulder, Colorado, September 25, 2025.

[TP44] **University of Colorado Boulder**, Institute of Cognitive Science, "Designing AI to Empower People: Datasets, Collaborations, and Efficient Models." Boulder, Colorado, September 19, 2025.

[TP43] **Annual Conference for the American Association of Physics in Medicine**, "Analysis of the Accuracy of Avatar-Based Patient Positioning Technique for Radiation Therapy." Atharva Peshkar, **Danna Gurari**, and David Thomas. Washington DC, July 30, 2025. **Snap Oral Presentation: top 33% from ∼2,200 submitted abstracts.**

[TP42] **Carnegie Mellon University**, Accessibility Research Group, "AI Descriptions of Visual Content Taken by People With Visual Impairments: The Past Decade and What's Next." Virtual, March 24, 2025.

[TP41] **Annual Conference for the American Academy of Optometry**, "AI Descriptions of Visual Content Taken by People With Visual Impairments: The Past Decade and What's Next." Indianapolis, Indiana, November 7, 2024.

[TP40] **University of Colorado Boulder**, Computer Science Department, "Designing Computer Vision Solutions for Real-World Applications." Boulder, Colorado, September 12, 2024.

[TP39] **Annual Conference for the American Association of Physics in Medicine**, "Analysis of the Accuracy of Computer Vision Assisted Surface-Guided Radiation Therapy." Atharva Peshkar, **Danna Gurari**, Sarah Milgrom, Willem Schreuder, and David Thomas. Houston, Texas, July 22, 2024. **Best in Physics Award: 15 awardees from ∼2,200 submitted abstracts. Science Council Session's 'Innovations in Medical Physics' Award: 12 awardees from 138 submitted abstracts.**

[TP38] **Annual Conference for the American Association of Physics in Medicine**, "Analysis of the Accuracy of External Surrogate for Deep Inspiration Breath-Hold in the Case of Thoracic and Abdominal Breathing Patterns." Brian Shaver, Atharva Peshkar, Brecca Gaffney, **Danna Gurari**, and David Thomas. Houston, Texas, July 22, 2024.

[TP37] **Computer Vision and Pattern Recognition (CVPR)**, Computer Vision with Humans in the Loop Workshop, "Predicting When to Engage Humans to Efficiently, Collect High Quality Image and Video Annotations" Seattle, Washington, June 18, 2024.

[TP36] **University of California, Irvine**, Future of Accessible Work and GenAI Workshop, "AI Descriptions of Visual Content Taken by People With Visual Impairments: The Past Decade and What's Next." Virtual, June 7, 2024.

[TP35] **University of Minnesota**, Virtual Perception and Cognitive Science Seminar, "AI Descriptions of Visual Content Taken by People With Visual Impairments: The Past Decade and What's Next." Virtual, December 12, 2023.

[TP34] **Google**, Fairness in Datasets for Machine Learning in Accessibility Workshop, "Responsible Data Practices Panel." Virtual, August 10, 2023.

[TP33] **Smith-Kettlewell Eye Research Institute**, Functional Vision and Accessibility (FVA) Conference, "AI Descriptions of Visual Content Taken by People With Visual Impairments: The Past Decade and What's Next." Virtual, August 4, 2023.

[TP32] **Annual Conference for the American Association of Physics in Medicine**, "Computer Vision Assisted Alignment for Stereotactic Body Radiation Therapy (SBRT)." Atharva Peshkar, **Danna Gurari**, Sergi Pujades, Michael Black, and David Thomas. Houston, Texas, July 25, 2023. **Best in Physics Award: 15 awardees from ∼2,200 submitted abstracts.**

[TP31] **Sight Tech Global**, "Did Computer Vision AI Just Get Worse or Better?" Virtual, December 8, 2022.

[TP30] **Computer Vision and Pattern Recognition (CVPR)**, UG^2+ Challenge: Bridging Gap Between Computational Photography, "Understanding Quality Issues in Images Taken by Blind People and Their Implications for AI that Describes the Images." New Orleans, Louisiana, June 20, 2022.

[TP29] **Stanford**, Vision Lab, "Describing Images with AI: Challenges and Opportunities for a Real-World Application." Virtual, June 6, 2022.

[TP28] **Apple**, Human-Centered Machine Learning Group, "Describing Images with AI: Challenges and Opportunities for a Real-World Application." Virtual, May 23, 2022.

[TP27] **Microsoft**, Ability Summit, "AI and Accessibility in the Cloud." Virtual, May 10, 2022.

[TP26] **International Conference on Information Technology (Keynote)**, "Describing Images with AI: Challenges and Opportunities for a Real-World Application." Virtual, April 12, 2022.

[TP25] **University of Houston**, Mathematics Department's Data-Enabled Science Seminar, "Designing Computer Vision Algorithms to Support Real Users and Recognize Multiple Perspectives." Virtual, October 22, 2021.

[TP24] **Computer Vision and Pattern Recognition (CVPR)**, Future of Computer Vision Datasets Workshop, "Current Limitations of Computer Vision Datasets." Virtual, June 20, 2021.

[TP23] **NLP Highlights Podcast**, Allen Institute for AI, "VQA for Real Users." Virtual, May 4, 2021.

[TP22] **European Chapter of the Association for Computational Linguistics**, LANTERN - The Third Workshop Beyond Vision and Language: Integrating Real World Knowledge, "Vision and Language Problems for a Real-World Application of Describing Images Taken by People Who Are Blind." Virtual, April 20, 2021.

[TP21] **IBM Research Seminar**, "Vision and Language Problems for a Real-World Application of Describing Images Taken by People Who Are Blind." Virtual, March 23, 2021.

[TP20] **Sight Tech Global**, "Computer Vision, AI and Accessibility: What's missing from this picture?" Virtual, December 3, 2020.

[TP19] **The Smith-Kettlewell Eye Research Institute**, A State of the Science Virtual Conference on Rehabilitation Technology and Methods in Blindness and Low Vision, "Challenges and Opportunities for Computer Vision." Virtual, October 23, 2020.

[TP18] **Computer Vision and Pattern Recognition (CVPR)**, Visual Question Answering and Dialog Workshop, "Visual Question Answering: Challenges and Opportunities for a Real-World Application." Seattle, Washington, June, 2020.

[TP17] **Microsoft**, Research Webinar Series, "Designing Computer Vision Algorithms to Describe the Visual World to People Who Are Blind or Low Vision." Redmond, Washington, March, 2020.

[TP16] **University of Colorado Boulder**, Computer Science Department, "Designing Computer Vision Algorithms to Support Real Users and Recognize Multiple Perspectives." Boulder, Colorado, March, 2020.

[TP15] **Microsoft**, Faculty Fellowship Summit, "Designing Computer Vision Algorithms to Support Real Users and Recognize Multiple Perspectives." Redmond, Washington, February, 2020.

[TP14] **Microsoft**, Faculty Summit's Crowd, Cloud and the Future of Work Workshop, "Learning to Recognize When and Why a Crowd Will Offer Different Answers to a Visual Question." Redmond, Washington, July, 2019.

[TP13] **Microsoft**, Faculty Summit, "Learning to Describe Images Taken by People Who Are Blind." Redmond, Washington, July, 2019.

[TP12] **European Conference on Computer Vision (ECCV)**, Workshop on Shortcomings in Vision and Language (SiVL), "Visual Questions: Learning to Assist Blind People and Detect When/Why a Crowd Will Disagree on the Answer." Munich, Germany, September, 2018.

[TP11] **Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI)**, Workshop on Large-scale Annotation of Biomedical data and Expert Label Synthesis (LABELS), "Mixing Crowds, Machines, and Experts for Biomedical Image Annotation." Quebec, September, 2017.

[TP10] **Computer Vision and Pattern Recognition (CVPR)**, Computer Vision for Microscopy Image Analysis (CVMI) Workshop, "Mixing Crowds, Machines, and Experts for Biomedical Image Annotation." Las Vegas, Nevada, July, 2016.

[TP9] **University of Texas at Austin**, School of Information, "Mixing Crowds, Machines, and Experts for Scalable Image Annotation." Austin, Texas, May, 2016.

[TP8] **University of Rochester**, Computer Science Department, "Mixing Crowds, Machines, and Experts for Scalable Image Annotation." Rochester, New York, October, 2015.

[TP7] **Tufts University**, Computer Science Department, "Combining Crowd Worker, Algorithm, and Expert Efforts to Accurately and Efficiently Annotate Images." Medford, Massachusetts, April, 2015.

[TP6] **University of Texas at Austin**, Computer Vision Group, "Combining Crowd Worker, Algorithm, and Expert Efforts to Accurately and Efficiently Annotate Images." Austin, Texas, April, 2015.

[TP5] **Massachusetts Institute of Technology (MIT)**, Media Lab's Camera Culture Group, "Combining Crowd Worker, Algorithm, and Expert Efforts to Accurately and Efficiently Annotate Images." Cambridge, Massachusetts, March, 2015.

[TP4] **Massachusetts Institute of Technology (MIT)**, Computer Science and Artificial Intelligence Laboratory's Computer Vision Group, "How to Utilize Crowdsourced Humans and Computers to Efficiently Collect Accurate Boundaries of Objects in Images?" Cambridge, Massachusetts, December, 2014.

[TP3] **Massachusetts Institute of Technology (MIT)**, Computer Science and Artificial Intelligence Laboratory's Computer Graphics Group, "How to Utilize Crowdsourcing and Algorithms to Efficiently Collect Accurate Boundaries of Objects in Images?" Cambridge, Massachusetts, October, 2014.

[TP2] **Istituto Italiano di Tecnologia (IIT)**, Pattern Analysis and Computer Vision Department, "Segmentation of Interacting Cells", Genova, Italy, September, 2012.

[TP1] **Boston University**, Image and Video Computing Group Seminar, "Segmentation of Interacting Cells," Boston, Massachusetts, April, 2012.

Outreach Presentations

[OP4] **Boston University**, "Computer Vision and My Journey to Develop an Academic Career in this Field." *Boston University ACM-W Student Chapter*, August 2020.

[OP3] **Boston University**, "Introduction to Computer Vision." Four presentations to female high school students from the Boston community, *The Artemis Project*, Boston, Massachusetts, July 2014, July 2013, June 2012, and July 2011.

[OP2] **Boston University**, "Automated Cell Tracking." Presentation to first year BU undergraduate students, *Kern Leadership Workshop*, Boston, Massachusetts, September, 2011.

[OP1] **Boston University**, "How to Find and Win a Fellowship." Presentation to undergraduate and first year graduate science and engineering female students, *Graduate Women In Science and Engineering Seminar*, Boston, Massachusetts, September, 2011.

TEACHING ACTIVITIES

Course: First Year Seminar (COEN 1500) Fall 2025
Role: Created new curriculum and materials
Audience: Undergraduate students at University of Colorado Boulder
Enrollment: 19 students

Course: Neural Networks and Deep Learning (CSCI 5922) Fall 2022, Springs 2022 and 2024 - 2026
Role: Created new curriculum and materials
Audience: Undergraduate and graduate students at University of Colorado Boulder
Enrollments: 87 - 190 students

Course: Recent Advances in Computer Vision (CSCI 7000) Falls 2021 and 2023 - 2024
Role: Created new curriculum and materials
Audience: Graduate students at University of Colorado Boulder
Enrollments: 12 - 22 students

Course: Introduction to Machine Learning Fall 2018, Springs of 2018 - 2021
Role: Created new curriculum and materials
Audience: Graduate students at University of Texas at Austin
Enrollments: 18 - 22 students

Course: Crowdsourcing for Computer Vision Spring 2017, Fall 2017, Fall 2019
Role: Created new curriculum and materials
Audience: Graduate students at University of Texas at Austin
Enrollments: 15 - 18 students

Guest Lectures

- Course: Disciplinary Foundations, Topic: Machine Learning 2017, 2019
- Course: Human Computation and Crowdsourcing, Topic: Crowdsourcing for Computer Vision 2017
- Course: Honors Machine Learning and Vision, Topic: Binary Image Analysis 2015
- Course: Image and Video Computing, Topic: Active Contours 2014

Teaching Fellowships

- Course: Introduction to Internet Technologies and Web Programming, Audience: Undergraduate 2014
- Course: Image and Video Computing, Audience: Graduate 2011

Education Lead, Boulder Imaging 2008 - 2010
Role: Created curriculum and materials (primarily recorded videos)
Audience: Employees and customers
Topics: High performance cameras, video standards, high performance digital video recording systems, and image processing and analysis

ADVISING AND MENTORING

- All students with a listed conclusion date and no asterisk (*) completed their degree with me

Postdoctoral Fellows, Advisor

Samreen Anjum	August 2023 - May 2024
Abigale Stangl	May 2019 - Dec 2020

Doctoral Students, Advisor

Zhuoheng Li	August 2024 - Present
Nicholas Cooper	August 2023 - Present
Neelima Prasad	August 2023 - Present
Jarek Reynolds	August 2023 - Present
Atharva Peshkar*	August 2022 - Present
Yu-Yen (Everley) Tseng	August 2021 - Present
Josh Myers-Dean, Ph.D.	August 2021 - June 2025
Reza Akbarian Bafghi*	August 2021 - December 2022
Chongyan Chen, Ph.D.	May 2020 - May 2025
Samreen Anjum, Ph.D.	August 2018 - July 2023
Tai-Yin Chiu, Ph.D.	May 2019 - Oct 2022
Yinan Zhao, Ph.D.	August 2017 - Aug 2021

Masters Students, Thesis Advisor

Anush Kumar Venkatesh	August 2023 - May 2024
Ojasvi Bhalerao	January 2022 - May 2023
Chongyan Chen	September 2019 - May 2019
Yanan Wang	January 2019 - August 2019
Meng Zhang	January 2019 - May 2019
Xiaoyu (Edith) Zeng	January 2019 - May 2019

Masters Students, Independent Study

Anirudh Ragam	August 2025 - May 2025
Nikolai Lyssogor	January 2025 - December 2025
Joanna Wang	January 2025 - May 2025
Mo Zhou	August 2024 - May 2025
Aashish Mukund	January 2024 - December 2024
Stuti Pandey	January 2023 - May 2024
Chandra Kanth Nagesh	July 2022 - May 2023
Alexander (Alec) Bell	August 2021 - November 2022
Sanjana Tripathi	Spring 2020
Anubrata Das	January 2019 - October 2019
Nilavra Bhattacharya	January 2018 - December 2019

Chi (Benny) Lin	August 2017 - May 2019
Ambika Verma	May 2017 - September 2019
Brandon Uyvu Dang	May 2017 - May 2018
Aimee Yun-Fang Lin	January 2017 - September 2017
Anuparna Banerjee	January 2017 - September 2017
Samridhi Ojha	January 2017 - September 2017
Weixuan Fu	January 2017 - September 2017
Esha Kothari	July 2016 - August 2017

Undergraduate Students, Independent Study

Neel Karsanbhai	August 2022 - May 2023
Jarek Reynolds	January 2022 - May 2023

Doctoral Students, Committee Member

Jen MacDonald	March 2026 - Present
Nidhin Harilal	March 2026 - May 2026
Nolan Brady	April 2024 - Present
Xuefei Sun	January 2024 - Present
Michelle Ramsahoye	August 2024 - January 2025
Mohammad Imrul Jubair	April 2024 - May 2024
Rey Koki	December 2023 - January 2024
Jaxsen Day	September 2019 - Present
Mohsena Ashraf	November 2023 - December 2023
Shivendra Agrawal	May 2023 - June 2023
Nathan Davis	January 2019 - November 2024
Mary Martin	May 2024 - July 2024
Michael McCabe	August 2023 - April 2024
Lucas Hayne	September 2022 - October 2023
Xu Han	October 2021 - July 2023
Tyler Scott	September 2021 - Jan 2023
Mitch Fulton	Spring 2022
Mehrnoosh Sameki	April 2014 - August 2017

Masters Students, Committee Member

Claire Simpson	May 2023 - May 2024
Lu Jin	January 2020 - May 2020
Yifan Gong	January 2019 - May 2019
Brandon Uyvu Dang	January 2018 - May 2018

Undergraduate Students, Committee Member

Eric Fithian	August 2024 - May 2025

Visiting Researcher

Qing Li	Summer 2018

Online Mentoring

MeToMeToo, *www.metometoo.com*	2011 - 2013

My twin sister and I published resources we used while developing academic careers, with the larger goal

of establishing a centralized resource for those pursuing similar careers. Our articles to date have over 3,000 views from an international audience.

PROFESSIONAL SERVICE

Conference Co-Organizer

(CVPR) Accessibility Chair	2023 - 2024
(HCOMP) Works in Progress and Demos co-chair	2021
Interdisciplinary User-Centered Health Informatics Conference: Aging, Culture, and Community	2019
(CVPR) Student Volunteer Chair	2018

Workshop Co-Founder and/or Co-Organizer

(CVPR) AVA: Accessibility, Vision, and Autonomy Meet	2022 - 2025
(CVPR) VizWiz Grand Challenge: Describing Images and Videos Taken by Blind People	2020 - 2026
(CVPR) UG^2+ Challenge: Bridging Gap Between Computational Photography & Visual Recognition	2021
(CSCW) Good Systems: Ethical AI	2019
(ECCV) VizWiz Grand Challenge: Answering Visual Questions from Blind People	2018
Lorentz-eScience Workshop on Crowdsourcing for Medical Image Analysis	2018
(HCOMP) GroupSight: Workshop on Human Computation for Image and Video Analysis	2016, 2017

Area Chair

IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)	2023 - 2026
IEEE Winter Conference on Applications in Computer Vision (WACV)	2016, 2022 - 2026

Program Committee/Reviewer

Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI)	2025
International Conference on Computer Vision (ICCV)	2025
Human Computation Journal	2021
ACM Transactions on Accessible Computing (TACCESS)	2020
European Conference on Computer Vision (ECCV)	2020
AAAI Conference on Human Computation and Crowdsourcing (HCOMP)	2019
ACM Conference on Human Factors in Computing Systems (CHI)	2016 - 2017, 2019
MICCAI Workshop on Large-scale Annotation of Biomedical data and Expert Label Synthesis (LABELS)	2016 - 2017
MICCAI Interactive Medical Image Computing (IMIC) Workshop	2016
AAAI Conference on Artificial Intelligence	2016
ACM Transactions on Intelligent Systems and Technology (ACM TIST)	2015
Computer Vision and Image Understanding (CVIU)	2015
Winter Conference on Applications of Computer Vision (WACV)	2014 - 2015

Departmental Service

AI Curriculum Committee, University of Colorado Boulder	2025 - 2026
Pedagogy Committee, University of Colorado Boulder	2025 - 2026
Executive Committee, University of Colorado Boulder	2023 - 2025
Diversity, Equity, and Inclusion Committee, University of Colorado Boulder	2021 - 2023
Chair of Faculty/Staff Awards & Honors Nominating Committee, University of Texas at Austin	2020 - 2021
Committee on Committees, University of Texas at Austin	2019 - 2021
Doctoral Studies Committee, University of Texas at Austin	2019 - 2020
Assistant Professor Search Committee, University of Texas at Austin	2018 - 2019

Undergraduate Education Committee, University of Texas at Austin 2018 - 2019
Faculty Workload Committee, University of Texas at Austin 2018
TA Task Force, University of Texas at Austin 2018
Seminar Series Organizer for Image and Video Computing Group, Boston University 2011 - 2015

University Service

AB Nexus Grant Proposal Review 2024
Professional Development Chair for Graduate Women in Science & Engineering, Boston University 2011 - 2013

Other

National Science Foundation Robust Intelligence Grant Proposal Review Panel 2026
National Science Foundation Human-Centered Computing Grant Proposal Review Panel 2021
Silicon Valley Community Foundation Chan Zuckerberg Initiative Grant Proposal Review 2019
National Science Foundation Cyber-Human Systems Grant Proposal Review Panel 2018

MEDIA COVERAGE

CU Anschutz Today 2025
- "Hidden Visual Problems Can Signal Often Undertreated Traumatic Brain Injuries"

WIRED 2023
- "AI Could Change How Blind People See the World"

CVPR Daily 2021
- "VizWiz Grand Challenge Workshop"

EurekAlert! 2021
- "One-size fits all image descriptions on the web don't meet the needs of blind people"

TechXplore 2021
- "Keeping the unseen safe: Improving digital privacy for blind people"

Mirage News 2021
- "Keeping unseen safe: Improving digital privacy for blind people"

CU Boulder CEAS News 2021
- "Keeping the unseen safe: Improving digital privacy for blind people"

Analytics India Magazine 2020
- "How Microsoft Is Enabling Its AI-Based Technology To Be Disability-Inclusive"

DE 24 News with article reposted to **AlKhaleej Today and The Next Web** 2020
- "Microsoft unveils efforts to make AI more accessible to people with disabilities"

TechCrunch with article reposted to **Yahoo! Finance, Daily News, Dizzed, HEDGE Accordingly, iTechNews, ProWell Tech, Small Tech News, and Tweaks** 2020
- "Microsoft and partners aim to shrink the 'data desert' limiting accessible AI"

TechRepublic 2020
- "Microsoft wants AI to be more helpful for people who are blind or use wheelchairs"

Microsoft AI Blog 2020
- "Shrinking the 'Data Desert': Inside Efforts to Make AI systems More Inclusive of People With Disabilities"

IBM Research Blog for publication [C22] 2020
- "Image Captioning as an Assistive Technology"

Alastair Somerville on Medium.com for publication [C20] 2020
- "Adding Context to Alt Text: User Centred Image Description"

Microsoft Research Blog for publication [C20] 2020
- "Alt Text That Informs: Meeting the Needs of People Who Are Blind or Low Vision"

The Daily Texan 2019
- "UT, Microsoft Researchers Seek to Make Computers More Accessible to People Who Are Blind"

MIT Technology Review for publication [C11] 2018
- "A New Data Trove Could Teach Computers to Tell Blind People What They Need to Know"

Korea IT Times for publication [C11] 2018
- "SK Telecom Wins Prize at 'VizWiz Grand Challenge 2018'"

D!gitalist Magazine for publication [C11] 2018
- "Computer Vision: An Artificial Eye To Blind People"

Center for Data Innovation Blog for publication [C11] 2018
- "Training Virtual Assistants for People Who Are Blind"

Denis Dushi et al. on Medium.com for publication [C11] 2018
- "VizWiz: Computer Vision Researchers Join Forces for Social Good"