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Dr. Garreth Tigwell is an Assistant Professor in the School of Information at the Rochester Institute of Technology. He studied at the University of Dundee, where he received a BSc (Hons) in Psychology, an MSc (with distinction) in User Experience Engineering, and a PhD in Human-Computer Interaction. His research interests cover accessibility, design, and human-computer interaction, and he primarily focuses on making digital content, services, and systems accessible to disabled people by understanding and addressing challenges faced by novice and expert digital creators (e.g., mobile app and website designers). This also includes exploring the role of culture in accessible design, as well as how adaptable design for customized or personalized experiences can improve accessibility and usability in both common scenarios (e.g., when using mobile apps) and novel scenarios (e.g., when interacting on textured surfaces in mixed reality experiences). He has published at top-tier ACM conferences and journals such as ASSETS, CHI, CSCW, DIS, IMWUT, PACMHCI, TACCESS, and TOCHI. He has received best paper and honorable mention awards and has received funding through organizations such as the National Science Foundation.

Table of Contents

Academic Employment

Rochester Institute of Technology (RIT)
- Assistant Professor, School of Information; August 2019 – Present

Education

PhD in Human-Computer Interaction
University of Dundee; March 2015 – May 2019
Improving Content Design on Mobile Devices to Reduce Situational Visual Impairments
Supervised by Dr. David Flatla and Dr. Rachel Menzies

MSc in User Experience Engineering (Awarded Distinction)
University of Dundee; September 2013 – September 2014
Choosing Accessible Web Colours for Web Developers and Designers
Supervised by Dr. David Flatla

BSc with Honours in Psychology (Awarded Upper Second-Class)
University of Dundee; September 2008 – June 2012
Belief-desire reasoning: A further comparison between bilingual and monolingual speakers
Supervised by Dr. Alissa Melinger

Grants and Funding

Awarded (PI total: $275,883; Total across all projects: $2,832,515)

- Benjamin Zwickl (PI), Nishant Malik (Co-PI), **Garreth W. Tigwell (Co-PI)**. October 2025 – Sep. 2028. "*Collaborative Research: Developing a causal map assessment tool for undergraduate career interest formation and decision-making*". National Science Foundation. Award No. 2500743. Award total: **$367,892**.

- **Garreth W. Tigwell (PI)**. May 2025 – Present (anticipated end date is Nov. 2026). "*Enhancing HCI Students' Experiences using Generative AI for Ideation and Futuristic Interaction Design*". RIT's Provost's Learning Innovation Grants. Award total: **$1,096**.

- **Garreth W. Tigwell (PI)**. May 2025 – Present (anticipated end date is Dec. 2025). "*Supporting Culturally Sensitive Web Accessibility Design Guidelines Research*". RIT GCCIS Faculty Education and Development (FEAD) Grant. Award total: **$7,720.**

- **Garreth W. Tigwell (PI)**. October 2024 – Present (anticipated end date is Sep 2026). "*Collaborative Research: HCC: Small: Creative Accessibility Design Tools for Mobile App Creators: Enhancing Inclusion through Innovative Design Methods*". National Science Foundation. Award No. 2333220. Award total: **$247,035**.
    - *Note: This is a collaborative project with Dr. Anne Ross (Bucknell University), who is PI on the connected award (NSF Award No. 2333221). We are both co-leading the efforts across the project.*

- Matt Huenerfauth (PI), **Garreth W. Tigwell (Co-PI)**. August 2022 – Present (anticipated end date is July 2026). "*HCC: Medium: Collaborative Research: Linguistically-Driven Sign Recognition from Continuous Signing for American Sign Language (ASL)*". National Science Foundation. Award No. 2212303. Award total: **$165,014**.

- Cecilia Alm (PI), Reynold Bailey (Co-PI), Esa Rantanen (Co-PI), Ferat Sahin (Co-PI), Jamison Heard (Co-PI), Rain Bosworth (Senior Personnel), Gabriel Diaz (Senior Personnel), Matt Huenerfauth (Senior Personnel as of Aug 2022), Christopher Kanan (Senior Personnel), **Garreth W. Tigwell (Senior Personnel as of Aug 2022)**. Sep 2021 – Present (anticipated end date is Aug 2026). "*NRT-AI: AWARE-AI: AWAREness for Sensing Humans Responsibly with AI*". National Science Foundation. Award No. 2125362. Award total: **$2,018,644**.

- **Garreth W. Tigwell (PI)**. August 2024 – May 2025. "*Tools to Improve Mobile App User Interface Design for People with Vision Impairments*". The iSchools Inc. Organization. Award total: **$4,980**.

- **Garreth W. Tigwell (PI)**. April 2023 – December 2023. "*Learning from the Interactive Surfaces and Spaces Research Community*". RIT GCCIS Faculty Education and Development (FEAD) Grant. Award total: **$2,560**.

- **Garreth W. Tigwell (PI).** January 2022 – December 2022. "*Designing Adaptive User Interfaces for Augmented Reality During Textured Surface Interaction*". RIT GCCIS Research & Scholarship Award. Award total: **$7,525.**

- **Garreth W. Tigwell (PI).** May 2020 – December 2021. "*Identifying Opportunities and Challenges in the Design Process to Increase Collaborations Between Designers and Disabled People*". RIT Grant Writers' Boot Camp 2020 seed funding. Award total: **$4,967**.

- Benjamin Gorman (PI), **Garreth W. Tigwell (Co-PI)**, Erin Brady (Collaborator), Rachel Menzies (Collaborator). June 2019 – December 2019. "*Accessible Emoji*". Bournemouth University Acorn Fund. Award total: **$5082** (awarded as £4,002).

Awards and Recognitions

2025   Honorable Mention award for MobileHCI 2025 (see publication J.11).
2024   Honorable Mention award (top 5%) for CHI 2024 (see publication C.10).
2023   Honorable Mention award (top 5%) for CHI 2023 (see publication C.9).
2022   Best Paper award for MobileHCI 2022 (see publication J.4).
2021   Recognition of service certificate in appreciation for contributions to ACM (ASSETS 2021).

I have received special recognition for outstanding paper reviews for the following conferences/tracks and years: CHI (2020 x2, 2021, 2022 x4, 2023 x2, 2024 x4), CHI LBW (1X 2024, 1x 2025), CSCW (2021, 2022), ISS (2023), and MobileHCI (2023).

Scholarship — UG = undergraduate and G = graduate student when the research was conducted.
Note: For many of the publications listed throughout this CV, senior researcher authorship is often in reverse order of contribution after the students who led the work, with the primary advisor/PI typically positioned at the end.

Journal papers (Peer Reviewed)

J.12   Laleh Nourian G, Kristen Shinohara, and **Garreth W. Tigwell** (2025). Cultural Crossroads in Design: Insights From Non-Western Immigrant Designers Working in Design Teams in the U.S. *International Journal of Human–Computer Interaction*, 1–27. https://doi.org/10.1080/10447318.2025.2596310

J.11   Jiangnan Xu G, Sanzida Mojib Luna G, Konstantinos Papangelis, **Garreth W. Tigwell**, Nicolas LaLone, Michael Saker, Samuli Laato, John Dunham G, Yihong Wang, and Alan Chamberlain. 2025. Understanding the Interplay Between the Digital and the Physical in Shared Augmented Reality Gaming: Probing through Urban Legends. *ACM Trans. Comput.-Hum. Interact*. 32, 6, Article 57 (December 2025), 24 pages. https://doi.org/10.1145/3749841

J.10   Sarah Andrew G and **Garreth W. Tigwell**. 2025. Understanding the Experiences of People With and Without Vision Impairments When Using Mobile User Interface Alternative Color Modes. *Proc. ACM Hum.-Comput. Interact*. 9, 5, Article MHCI034 (September 2025), 25 pages. https://doi.org/10.1145/3743704 [Acceptance rate: 27.2%]

J.9   Saad Hassan, Caluã de Lacerda Pataca G, Akhter Al Amin, Laleh Nourian G, Diego Navarro UG, Sooyeon Lee, Alexis Gordon UG, Matthew Watkins G, **Garreth W. Tigwell**, and Matt

Huenerfauth. 2024. Exploring the Benefits and Applications of Video-Span Selection and Search for Real-Time Support in Sign Language Video Comprehension among ASL Learners. *ACM Trans. Access. Comput*. 17, 3, Article 14 (September 2024), 35 pages. https://doi.org/10.1145/3690647

J.8   Palavi V. Bhole [G], Ziming Li [G], Shivang Bokolia [G], Tae Oh, **Garreth W. Tigwell**, and Roshan L. Peiris. 2024. Haptic2FA: Haptics-Based Accessible Two-Factor Authentication for Blind and Low Vision People. *Proc. ACM Hum.-Comput. Interact.* 8, MHCI, Article 264 (September 2024), 20 pages. https://doi.org/10.1145/3676509

J.7   Carla F. Griggio, Benjamin M. Gorman, and **Garreth W. Tigwell**. 2024. Party Face Congratulations! Exploring Design Ideas to Help Sighted Users with Emoji Accessibility when Messaging with Screen Reader Users. *Proc. ACM Hum.-Comput. Interact*. 8, CSCW1, Article 175 (April 2024), 31 pages. https://doi.org/10.1145/3641014

J.6   Sarah Andrew [G], Chelsea Bishop [UG], and **Garreth W. Tigwell**. 2024. Light and Dark Mode: A Comparison Between Android and iOS App UI Modes and Interviews with App Designers and Developers. *Proc. ACM Interact. Mob. Wearable Ubiquitous Technol*. 8, 1, Article 33 (March 2024), 23 pages. https://doi.org/10.1145/3643539

J.5   Sarah Andrew [G] and **Garreth W. Tigwell**. 2022. Accessible Design is Mediated by Job Support Structures and Knowledge Gained Through Design Career Pathways. *Proc. ACM Hum.-Comput. Interact*. 6, CSCW2, Article 487 (November 2022), 24 pages. https://doi.org/10.1145/3555588

J.4   Manisha Kamarushi [G], Stacey L. Watson, **Garreth W. Tigwell**, and Roshan L. Peiris. 2022. 🏆 OneButtonPIN: A Single Button Authentication Method for Blind and Low Vision Users to Improve Accessibility and Prevent Eavesdropping. *Proc. ACM Hum.-Comput. Interact*. 6, MHCI, Article 212 (September 2022), 22 pages. https://doi.org/10.1145/3546747 [**Best Paper**]

J.3   Rachel Menzies, **Garreth W. Tigwell**, and Michael Crabb. 2022. Author Reflections on Creating Accessible Academic Papers. *ACM Trans. Access. Comput*. *(TACCESS)*. 15, 4, Article 33 (December 2022), 36 pages. https://doi.org/10.1145/3546195

J.2   Jaisie Sin [G], Cosmin Munteanu, Michael Nixon, Velian Pandeliev, **Garreth W. Tigwell**, Kristen Shinohara, Anthony Tang, and Steve Szigeti. 2022. Uncovering inclusivity gaps in design pedagogy through the digital design marginalization framework. *Front. Comput. Sci*. 4:822090. https://doi.org/10.3389/fcomp.2022.822090

J.1   **Garreth W. Tigwell** [G], David R. Flatla, and Neil D. Archibald [UG]. 2017. ACE: A Colour Palette Design Tool for Balancing Aesthetics and Accessibility. *ACM Trans. Access. Comput*. *(TACCESS)*. 9, 2, Article 5 (January 2017), 32 pages. https://doi.org/10.1145/3014588

Conference papers (Peer Reviewed)

Note: Top-tier computer science conferences employ rigorous double-anonymous peer review. CS conferences are highly selective and can be as prestigious and more impactful than journals (doi.org/10.1145/1743546.1743569).

C.15   Connor Geddes [G], Edward Curran Eggertson, Jonathan Sutton, and **Garreth W. Tigwell**. 2025. Designing for Colour Vision Deficiency: A Scoping Review of Resources That Support Designers in Choosing Accessible Colours. In *The 27th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '25)*, October 26–29, 2025, Denver, CO, USA. ACM, New York, NY, USA, 17 pages. DOI: 10.1145/3663547.3746370 [Acceptance rate: 29.7%]

C.14   Laleh Nourian [G], Vinaya Hanumant Naikar [G], Kristen Shinohara, and **Garreth W. Tigwell**. 2025. Investigating the Intersection of Cultural Design Preferences and Web Accessibility Guidelines with Designers from the Global South. In *CHI Conference on Human Factors in Computing*

Systems (CHI '25), April 26–May 01, 2025, Yokohama, Japan. ACM, New York, NY, USA, 19 pages. DOI: 10.1145/3706598.3714326 [Acceptance rate: 25.1%]

C.13 Sanzida Mojib Luna [G], Jiangnan Xu [G], **Garreth W. Tigwell**, Nicolas LaLone, Michael Saker, Alan Chamberlain, David I Schwartz, and Konstantinos Papangelis. 2025. Exploring Deaf And Hard of Hearing Peoples' Perspectives On Tasks In Augmented Reality: Interacting With 3D Objects And Instructional Comprehension. In *CHI Conference on Human Factors in Computing Systems (CHI '25)*, April 26–May 01, 2025, Yokohama, Japan. ACM, New York, NY, USA, 14 pages. DOI: 10.1145/3706598.3713678 [Acceptance rate: 25.1%]

C.12 Tlamelo Makati [G], **Garreth W. Tigwell**, and Kristen Shinohara. 2024. The Promise and Pitfalls of Web Accessibility Overlays for Blind and Low Vision Users. In The *26th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '24)*, October 27–30, 2024, St. John's, NL, Canada. ACM, New York, NY, USA, 12 pages. DOI: 10.1145/3663548.3675650 [Acceptance rate: 30%]

C.11 Sanzida Mojib Luna [G], Jiangnan Xu [G], Konstantinos Papangelis, **Garreth W. Tigwell**, Nicolas LaLone, Michael Saker, Alan Chamberlain, Samuli Laato, John Dunham [G], and Yihong Wang. 2024. Communication, Collaboration, and Coordination in a Co-located Shared Augmented Reality Game: Perspectives From Deaf and Hard of Hearing People. In *CHI Conference on Human Factors in Computing Systems (CHI '24)*, May11–16, 2024, Honolulu, HI, USA. ACM, New York, NY, USA, 14 pages. DOI: doi.org/10.1145/3613904.3642953 [Acceptance rate: 26.3%]

C.10 Saad Hassan, Caluã de Lacerda Pataca [G], Laleh Nourian [G], **Garreth W. Tigwell**, Briana Davis [UG], and Will Zhenya Silver Wagman [G]. 2024. Designing and Evaluating an Advanced Dance Video Comprehension Tool with In-situ Move Identification Capabilities. In *CHI Conference on Human Factors in Computing Systems (CHI '24)*, May 11–16, 2024, Honolulu, HI, USA. ACM, New York, NY, USA, 19 pages. DOI: 10.1145/3613904.3642710 [Acceptance rate: 26.3%] [**Honorable Mention; Top 5%**]

C.9 Laleh Nourian [G], Kristen Shinohara, and **Garreth W. Tigwell**. 2023. Understanding Discussions Around Culture Within Courses Covering Topics on Accessibility and Disability at U.S. Universities. In *CHI Conference on Human Factors in Computing Systems (CHI '23)*, April 23–28, 2023, Hamburg, Germany. ACM, New York, NY, USA, 14 pages. DOI: 10.1145/3544548.3581533 [Acceptance rate: 28.39%] [**Honorable Mention; Top 5%**]

C.8 Esha Shandilya [G], Mingming Fan, and **Garreth W. Tigwell**. 2022. "I need to be professional until my new team uses emoji, GIFs, or memes first": New Collaborators' Perspectives on Using Non-Textual Communication in Virtual Workspaces. In *CHI Conference on Human Factors in Computing Systems (CHI '22)*, April 29-May 5, 2022, New Orleans, LA, USA. ACM, New York, NY, USA, 13 pages. DOI: 10.1145/3491102.3517514 [Acceptance rate: 24.7%]

C.7 Connor Geddes [G], David R. Flatla, **Garreth W. Tigwell**, and Roshan L. Peiris. 2022. Improving Colour Patterns to Assist People with Colour Vision Deficiency. In *CHI Conference on Human Factors in Computing Systems (CHI '22)*, April 29-May 5, 2022, New Orleans, LA, USA. ACM, New York, NY, USA, 17 pages. DOI: 10.1145/3491102.3502024 [Acceptance rate: 24.7%]

C.6 **Garreth W. Tigwell**. 2021. Nuanced Perspectives Toward Disability Simulations from Digital Designers, Blind, Low Vision, and Color Blind People. In *CHI Conference on Human Factors in Computing Systems (CHI '21)*, May 8–13, 2021, Yokohama, Japan. ACM, New York, NY, USA, 15 pages. DOI: 10.1145/3411764.3445620 [Acceptance rate: 26.3%]

C.5 Junchen Li [G], **Garreth W. Tigwell**, and Kristen Shinohara. Accessibility of High-Fidelity Prototyping Tools. 2021. In *CHI Conference on Human Factors in Computing Systems (CHI '21)*,

May 8–13, 2021, Yokohama, Japan. ACM, New York, NY, USA, 13 pages. DOI: 10.1145/3411764.3445520 [Acceptance rate: 26.3%]

C.4 **Garreth W. Tigwell** and Michael Crabb. 2020. Household Surface Interactions: Understanding User Input Preferences and Perceived Home Experiences. In *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems (CHI '20)*. Association for Computing Machinery, New York, NY, USA, 1–14. DOI: 10.1145/3313831.3376856 [Acceptance rate: 24.3%]

C.3 **Garreth W. Tigwell**, Benjamin M. Gorman, and Rachel Menzies. 2020. Emoji Accessibility for Visually Impaired People. In *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems (CHI '20)*. Association for Computing Machinery, New York, NY, USA, 1–14. DOI: 10.1145/3313831.3376267 [Acceptance rate: 24.3%]

C.2 **Garreth W. Tigwell** [G], David R. Flatla, and Rachel Menzies. 2018. It's Not Just the Light: Understanding the Factors Causing Situational Visual Impairments During Mobile Interaction. In *Proceedings of the 10th Nordic Conference on Human-Computer Interaction (NordiCHI '18)*. Association for Computing Machinery, New York, NY, USA, 338–351. DOI: 10.1145/3240167.3240207 [Acceptance rate: 24%]

C.1 **Garreth W. Tigwell** [G], Rachel Menzies, and David R. Flatla. 2018. Designing for Situational Visual Impairments: Supporting Early-Career Designers of Mobile Content. In *Proceedings of the 2018 Designing Interactive Systems Conference (DIS '18)*. Association for Computing Machinery, NY, USA, 387–399. DOI: 10.1145/3196709.3196760 [Acceptance rate: 22.9%]

Book Chapters (inc. peer-reviewed conference/extended abstract papers published as chapters)

B.6 Shwetha Subramanian [G], Renee Bogdany [UG], Michael Crabb, Roshan L. Peiris, and **Garreth W. Tigwell**. 2025. Exploring Mixed Reality Design Considerations for Adaptable User Interfaces to Improve Interaction on Physical Textured Surfaces. In: Jessie Chen, Gino Fragomeni (eds) *Virtual, Augmented and Mixed Reality. HCII 2025. LNCS 15790. Springer, Cham*. https://doi.org/10.1007/978-3-031-93715-6_22. [HCII '25 conference paper]

B.5 Jonathan Lazar, Abhinav Kannan [G], **Garreth W. Tigwell**, Rajiv Jain, Mary Ann Jawili, Yalpi Shiva Prasad, Alexa Siu, & Rick Treitman (2025). An Opportunity to Use AI to Support Content Creators in Creating Born-Accessible Documents. In Christo El Morr, Yahya El-Lahib, & Rachel Gorman (Eds.), *Beyond Tech Fixes: Towards an AI Future Where Disability Justice Thrives*. Springer: London.

B.4 Roshan Mathew [G], **Garreth W. Tigwell**, and Roshan L. Peiris. 2024. Deaf and Hard of Hearing People's Perspectives on Augmented Reality Interfaces for Improving the Accessibility of Smart Speakers. In: Antona, M., Stephanidis, C. (eds) Universal Access in Human-Computer Interaction. HCII 2024. Lecture Notes in Computer Science, vol 14697. Springer, Cham. https://doi.org/10.1007/978-3-031-60881-0_21. [HCII '24 conference paper]

B.3 Palavi Bhole [G], Kripa Kundaliya [G], **Garreth W. Tigwell**, and Roshan L. Peiris. 2024. Exploring the Need of Assistive Technologies for People with Olfactory Disorders. In: Antona, M., Stephanidis, C. (eds) Universal Access in Human-Computer Interaction. HCII 2024. Lecture Notes in Computer Science, vol 14696. Springer, Cham. https://doi.org/10.1007/978-3-031-60875-9_1. [HCII '24 conference paper]

B.2 Chloe Keilers [G], **Garreth W. Tigwell**, and Roshan L. Peiris. 2023. Data Visualization Accessibility for Blind and Low Vision Audiences. In: Antona, M., Stephanidis, C. (eds) *Universal Access in Human-Computer Interaction*. Lecture Notes in Computer Science, vol 14020. Springer, Cham. DOI: doi.org/10.1007/978-3-031-35681-0_26. [HCII '23 conference paper]

B.1   Katerina Gorkovenko [G], **Garreth W. Tigwell** [G], Christopher S. Norrie [G], Miriam Waite [G], and Daniel Herron [G]. 2017. ShopComm: Community-Supported Online Shopping for Older Adults. In Peter Cudd and Luc de Witte (Eds.) *Harnessing the Power of Technology to Improve Lives* (pp. 175-182). Studies in Health Technology and Informatics, vol 242. IOS Press. DOI: 10.3233/978-1-61499-798-6-175 [AAATE '17 conference paper]

Consortium papers (Juried)

Cnsrt.1   **Garreth W. Tigwell**, Kristen Shinohara, and Michael McQuaid. 2021. If You Don't Build It, They Won't Come: HCI has an Inaccessibility Problem. In *Human Computer Interaction Consortium (HCIC)*, June 20-24, 2021, Virtual Event. 5 pages. https://www.researchgate.net/publication/352262053_If_You_Don%27t_Build_It_They_Won %27t_Come_HCI_has_an_Inaccessibility_Problem

Experience Reports (Peer Reviewed)

ExpR.1   **Garreth W. Tigwell**, Roshan L. Peiris, Stacey Watson, Gerald M. Garavuso, and Heather Miller. 2020. Student and Teacher Perspectives of Learning ASL in an Online Setting. In *The 22nd International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '20)*, October 26–28, 2020, Virtual Event, Greece. ACM, New York, NY, USA, 6 pages. DOI: 10.1145/3373625.3417298 [Acceptance rate: 57%]

Poster papers (Peer Reviewed/Juried)

P.21   Sarah Andrew [G], Anisa Callis [G], Anne Spencer Ross, and **Garreth W. Tigwell**. 2025. Re-framing Accessibility from Constraint to Creative Catalyst. In *The 27th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '25)*, October 26–29, 2025, Denver, CO, USA. ACM, NY, NY, USA, 6 pages. DOI: 10.1145/3663547.3759714 [Acceptance rate: 66.1%]

P.20   Yugo Iwamoto [G], Muhammad Raees [G], Jamison Heard, and **Garreth W. Tigwell**. 2025. Exploring Generative AI to Support Disability Service Professionals in Writing Image Descriptions for HCI Science Figures. In *The 27th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '25)*, October 26–29, 2025, Denver, CO, USA. ACM, New York, NY, USA, 6 pages. DOI: 10.1145/3663547.3759763 [Acceptance rate: 66.1%]

P.19   Mehek S. Somai [G], Roshan L. Peiris, and **Garreth W. Tigwell**. 2025. A Review of Text Accessibility Standards, Guidelines, and Font Tool Limitations. In *The 27th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '25)*, October 26–29, 2025, Denver, CO, USA. ACM, New York, NY, USA, 7 pages. DOI: 10.1145/3663547.3759692 [Acceptance rate: 66.1%]

P.18   Sanzida Mojib Luna [G], Jiangnan Xu [G], Elise Baron, **Garreth W. Tigwell**, and Konstantinos Papangelis. 2025. Motivation and Re-engagement in Mixed Reality: How Deaf and Hard of Hearing Users Experience a Mixed Reality Exergame. In *The 27th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '25)*, October 26–29, 2025, Denver, CO, USA. ACM, New York, NY, USA, 5 pages. DOI: 10.1145/3663547.3759687 [Acceptance rate: 66.1%]

P.17   Sanzida Mojib Luna [G], **Garreth W. Tigwell**, Konstantinos Papangelis, and Jiangnan Xu [G]. 2024. Exploring Visual Scanning in Augmented Reality: Perspectives From Deaf and Hard of Hearing Users. In *The 26th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '24)*, October 27–30, 2024, St. John's, NL, Canada. ACM, New York, NY, USA, 6 pages. https://doi.org/10.1145/3663548.3688535 [Acceptance rate: 66.7%]

P.16   Vinaya Hanumant Naikar [G], Shwetha Subramanian [G], and **Garreth W. Tigwell**. 2024. Accessibility Feature Implementation Within Free VR Experiences. In *Extended Abstracts of the CHI Conference on Human Factors in Computing Systems (CHI EA '24)*, May 11–16, 2024,

Honolulu, HI, USA. ACM, New York, NY, USA, 9 pages.
https://doi.org/10.1145/3613905.3650935 [Acceptance rate: 33.9%]

P.15   Wenhao Luebs [G], **Garreth W. Tigwell**, and Kristen Shinohara. 2024. Understanding Expert Crafting Practices of Blind and Low Vision Creatives. In *Extended Abstracts of the CHI Conference on Human Factors in Computing Systems (CHI EA '24)*, May 11–16, 2024, Honolulu, HI, USA. ACM, New York, NY, USA, 8 pages.
https://doi.org/10.1145/3613905.3650960 [Acceptance rate: 33.9%]

P.14   Sanzida Mojib Luna [G], **Garreth W. Tigwell**, Konstantinos Papangelis, and Jiangnan Xu [G]. 2023. Communication and Collaboration Among DHH People in a Co-located Collaborative Multiplayer AR Environment. In *The 25th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '23)*, October 22–25, 2023, New York, NY, USA. ACM, New York, NY, USA, 5 pages. https://doi.org/10.1145/3597638.3614479 [Acceptance rate: 52%]

P.13   Sarah Andrew [G], Stacey Watson, Tae Oh, and **Garreth W. Tigwell**. 2023. Authentication Challenges in Customer Service Settings Experienced by Deaf and Hard of Hearing People. In *Extended Abstracts of the 2023 CHI Conference on Human Factors in Computing Systems (CHI EA '23)*, April 23– 28, 2023, Hamburg, Germany. ACM, New York, NY, USA, 8 pages. DOI: 10.1145/3544549.3585707 [Acceptance rate: 34%]

P.12   Nash Lyke [G], Benjamin M. Gorman, and **Garreth W. Tigwell**. 2023. Exploring the Accessibility of Crypto Technologies. In *Extended Abstracts of the 2023 CHI Conference on Human Factors in Computing Systems (CHI EA '23)*, April 23–28, 2023, Hamburg, Germany. ACM, New York, NY, USA, 10 pages. DOI: 10.1145/3544549.3585746 [Acceptance rate: 34%]

P.11   Athira Pillai [G], Kristen Shinohara, and **Garreth W. Tigwell**. 2022. Website Builders Still Contribute To Inaccessible Web Design. In *The 24th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '22)*, October 23–26, 2022, Athens, Greece. ACM, New York, NY, USA, 4 pages. DOI: 10.1145/3517428.3550368 [Acceptance rate: 59%]

P.10   Urvashi Kokate [G], Kristen Shinohara, and **Garreth W. Tigwell**. 2022. Exploring Accessibility Features and Plug-ins for Digital Prototyping Tools. In *The 24th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '22)*, October 23–26, 2022, Athens, Greece. ACM, NY, USA, 4 pages. DOI: 10.1145/3517428.3550391 [Acceptance rate: 59%]

P.9   Laleh Nourian [G], Kristen Shinohara, and **Garreth W. Tigwell**. 2022. Digital Accessibility in Iran: An Investigation Focusing on Iran's National Policies on Accessibility and Disability Support. In *The 24th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '22)*, October 23–26, 2022, Athens, Greece. ACM, New York, NY, USA, 5 pages. DOI: 10.1145/3517428.3550385 [Acceptance rate: 59%]

P.8   Becca Dingman [G], **Garreth W. Tigwell**, and Kristen Shinohara. 2021. Interview and Think-Aloud Accessibility for Deaf and Hard of Hearing Participants in Design Research. In *The 23rd International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '21)*, October 18–22, 2021, Virtual Event, USA. ACM, New York, NY, USA, 3 Pages. DOI: 10.1145/3441852.3476526 [Acceptance rate: 61.8%]

P.7   Becca Dingman [G], **Garreth W. Tigwell**, and Kristen Shinohara. 2021. Designing a Podcast Platform for Deaf and Hard of Hearing Users. In *The 23rd International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '21)*, October 18–22, 2021, Virtual Event, USA. ACM, NY, USA, 4 Pages. DOI: 10.1145/3441852.3476523 [Acceptance rate: 61.8%]

P.6 Trinh Le [G], Hashini Senaratne [G], Michael McQuaid, and **Garreth W. Tigwell**. 2021. Exploring a Multifaceted Framework to Support the Design of Mobile Apps for Self-Regulating Anxiety. In *CHI Conference on Human Factors in Computing Systems Extended Abstracts (CHI '21 Extended Abstracts)*, May8–13, 2021, Yokohama, Japan. ACM, New York, NY, USA, 7 pages. DOI: [10.1145/3411763.3451645](10.1145/3411763.3451645) [Acceptance rate: 39%]

P.5 Sarah Andrew [G], Stacey Watson, Tae Oh, and **Garreth W. Tigwell**. 2020. A Review of Literature on Accessibility and Authentication Techniques. In *The 22nd International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '20)*, October 26–28, 2020, Virtual Event, Greece. ACM, New York, NY, USA, 4 pages. DOI: [10.1145/3373625.3418005](10.1145/3373625.3418005) [Acceptance rate: 61.5%]

P.4 Rachel Menzies, Benjamin M. Gorman, and **Garreth W. Tigwell**. 2020. Reflections on Using Chat-Based Platforms for Online Interviews with Screen-Reader Users. In *The 22nd International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '20)*, October 26–28, 2020, Virtual Event, Greece. ACM, New York, NY, USA, 4 pages. DOI: [10.1145/3373625.3418000](10.1145/3373625.3418000) [Acceptance rate: 61.5%]

P.3 Rachel Menzies, **Garreth W. Tigwell**, and Mandar Tamhane [UG], and Annalu Waller. 2019. Weaving Accessibility Through an Undergraduate Degree. In *The 21st International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '19)*. Association for Computing Machinery, New York, NY, USA, 526–529. DOI: [10.1145/3308561.3354611](10.1145/3308561.3354611) [Acceptance rate: 59%]

P.2 Kerr Macpherson [UG], **Garreth W. Tigwell** [G], Rachel Menzies, and David R. Flatla. 2018. BrightLights: Gamifying Data Capture for Situational Visual Impairments. In *Proceedings of the 20th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '18)*. Association for Computing Machinery, New York, NY, USA, 355–357. DOI: [10.1145/3234695.3241030](10.1145/3234695.3241030) [Acceptance rate: 58%]

P.1 **Garreth W. Tigwell** [G] and David R. Flatla. 2016. Oh that's what you meant! reducing emoji misunderstanding. In *Proceedings of the 18th International Conference on Human-Computer Interaction with Mobile Devices and Services Adjunct (MobileHCI '16)*. Association for Computing Machinery, New York, NY, USA, 859–866. DOI: [10.1145/2957265.2961844](10.1145/2957265.2961844)

Workshop papers and proposals (Peer-reviewed/Juried)

W.11 Patricia Piedade [G], Peter A Hayton [G], Cynthia L Bennett, Anna R. L. Carter, Clara Crivellaro, Alan Dix, Jess McGowan [G], Katta Spiel, Miriam Sturdee, **Garreth W. Tigwell**, and Hugo Nicolau. 2025. Access InContext: Futuring Accessible Prototyping Tools and Methods. In *Extended Abstracts of the CHI Conference on Human Factors in Computing Systems (CHI EA '25)*, April 26–May 01, 2025, Yokohama, Japan. ACM, New York, NY, USA, 7 pages. https://doi.org/10.1145/3706599.3706716 [Acceptance rate: 24.85%]

- We ran this workshop at CHI 2025 with the goal of bringing together designers, practitioners, and researchers to reflect on current issues with creating accessible prototyping, and to identify opportunities for hands-on ideation and fabrication exercises aimed at futuring accessible prototyping. The workshop was offered as a hybrid experience and most attendees were in-person. More details are available on our workshop website - https://dcitizens.eu/access-incontext-chi25/.

W.10 Laleh Nourian [G], Yulia Goldenberg, Muhammad Adamu, Vikram Kamath Cannanure, Catherine Holloway, Neha Kumar, Katharina Reinecke, and **Garreth W. Tigwell**. 2024. Challenges and Considerations for Accessibility Research Across Cultures and Regions. In *The 26th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '24)*,

October 27–30, 2024, St. John's, NL, Canada. ACM, New York, NY, USA, 6 pages.
https://doi.org/10.1145/3663548.3688552

- We ran this virtual workshop at ASSETS 2024 to explore the intersection of accessibility, HCI, and cross-regional studies. Our aim was to bring together researchers and practitioners to foster new collaborations and identify underexplored research areas that could support more inclusive research practices. More details are available on our workshop website – https://lalehnourian.wixsite.com/access-culture.

W.9 Jiamin Dai, Benjamin M. Gorman, **Garreth W. Tigwell**, Helena Lyhme [G], Belén Barros Pena, Karyn Moffatt, and Celine Latulipe. 2024. accessFinTech: Designing Accessible Financial Technology. In *The 26th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '24)*, October 27–30, 2024, St. John's, NL, Canada. ACM, New York, NY, USA, 5 pages. https://doi.org/10.1145/3663548.3688551

- We ran this workshop at ASSETS 2024 to bring together researchers and industry practitioners to develop a research agenda for designing accessible and inclusive financial technologies. More details are available on our workshop website – https://accessfintechworkshop.github.io.

W.8 Emma McDonnell [G], Kelly Avery Mack [G], Kathrin Gerling, Katta Spiel, Cynthia Bennett, Robin N. Brewer, Rua M. Williams, and **Garreth W. Tigwell**. 2023. Tackling the Lack of a Practical Guide in Disability-Centered Research. In *The 25th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '23)*, October 22–25, 2023, New York, NY, USA. ACM, New York, NY, USA, 5 pages. https://doi.org/10.1145/3597638.3615650

- We ran this workshop for ASSETS 2023 to discuss current research approaches and explore opportunities to provide practical guidance for accessibility research that centers disabled people. The workshop was virtual with asynchronous and synchronous components and took place between October and December. More details are available on our workshop website – https://assets2023guide.mere.st.

W.7 **Garreth W. Tigwell**, Kristen Shinohara, and Laleh Nourian [G] (2021). Accessibility Across Borders. In *CHI Conference on Human Factors in Computing Systems (CHI'21) Workshop*: *Decolonizing HCI Across Borders*, May 8–13, 2021, Yokohama, Japan. ACM, New York, NY, USA, 4 pages. https://arxiv.org/abs/2105.01488

- This was a positional paper submitted to the CHI 2021 workshop Decolonizing HCI Across Borders.

W.6 Michael Crabb, Rachel Menzies, Benjamin M. Gorman, and **Garreth W. Tigwell**. Teaching Accessibility in Computing Workshop. *Scottish Informatics and Computer Science Alliance (SICSA)*. Held virtually on October 7, 2020.

- We ran this virtual SICSA workshop to explore the current state of accessibility teaching in Scotland by bringing together educators to reflect on their collective experiences. The discussion focused on challenges, successes, and opportunities for improving accessibility education across institutions

W.5 Cole Gleason [G], Patrick Carrington, Lydia B. Chilton, Benjamin M. Gorman, Hernisa Kacorri, Andrés Monroy-Hernández, Meredith Ringel Morris, **Garreth W. Tigwell**, and Shaomei Wu. 2019. Addressing the Accessibility of Social Media. In *Conference Companion Publication of the 2019 on Computer Supported Cooperative Work and Social Computing (CSCW '19).* Association for Computing Machinery, New York, NY, USA, 474–479. DOI: 10.1145/3311957.3359439

- We ran this in-person CSCW 2019 workshop to bring together researchers and practitioners to define high-priority accessibility challenges for social media platforms and to foster new collaborations aimed at addressing them. More details are available on our workshop website – https://socialandaccessible.wordpress.com.

W.4   **Garreth W. Tigwell** [G], Zhanna Sarsenbayeva [G], Benjamin M. Gorman, David R. Flatla, Jorge Goncalves, Yeliz Yesilada, and Jacob O. Wobbrock (2019). Addressing the Challenges of Situationally-Induced Impairments and Disabilities in Mobile Interaction. In *Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems (CHI EA '19)*. Association for Computing Machinery, New York, NY, USA, Paper W30, 1–8. DOI: 10.1145/3290607.3299029 [Acceptance rate: 31%]
- We ran this in-person CHI 20219 workshop to bring together researchers exploring how to understand, sense, model, and adapt technologies to mitigate the effects of Situationally-Induced Impairments and Disabilities. The workshop had a 31% acceptance rate. More details are available on our website: siid2019.wordpress.com.

W.3   Michael Crabb, Rachel Menzies, **Garreth W. Tigwell** [G], Daniel Clarke, Christopher Lim, and Cara Henderson [G] (2019) Take a GANDER. Gathering Accessibility Needs by Doing Explorative Research. *The Design Journal*, 22:sup1, 2303-2306, DOI: 10.1080/14606925.2019.1595040
- We proposed a walk-based activity for the European Academy of Design conference, which welcomed alternative formats for research dialogue and networking. Our walk explored situational impairments in real-time by guiding participants along a route in Dundee while they used mobile devices that collected environmental and eye-tracking data. This format allowed us to generate ecologically valid data and foster discussion on accessibility in everyday contexts.

W.2   **Garreth W. Tigwell** [G], Nadia Taou [G], Sasa Radomirovic, Benjamin M. Gorman [G], Keith Edwards, David R. Flatla, and Alison Pease. Academic Writing with LaTeX. The *Scottish Informatics and Computer Science Alliance PhD Conference*. Held in Dundee, Scotland on June 28, 2017.
- We ran an in-person workshop for the SICSA PhD Conference to introduce PhD students to writing academic documents in LaTeX. The session covered essential formatting concepts and provided hands-on guidance to help students become more comfortable using the platform.

W.1   Michael Mauderer, **Garreth W. Tigwell** [G], Benjamin M. Gorman [G], and David R. Flatla (2017). Beyond accessibility: Lifting perceptual limitations for everyone. *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems Workshop*: *Amplification and Augmentation of Human Perception*. Association for Computing Machinery, New York, NY, USA, 5 pages. http://arxiv.org/abs/1709.08957
- This was a positional paper submitted to the CHI 2017 workshop Amplification and Augmentation of Human Perception.

Special Interest Groups (Panels)

SIG.1   Jiangnan Xu [G], Konstantinos Papangelis, **Garreth W. Tigwell**, Nicolas LaLone, Pengyuan Zhou, Michael Saker, Alan Chamberlain, John Dunham [G], Sanzida Mojib Luna [G], and David Schwartz. 2024. Spatial Computing: Defining the Vision for the Future. In *Extended Abstracts of the CHI (CHI EA '24)*. ACM, New York, NY, USA, Article 111, 4 pages. DOI: 10. 1145/3613905.3643978
- This CHI Special Interest Group panel bought together academic and industry professionals to explore current and future trends in Spatial Computing. Jiangnan Xu, Sanzida Mojib Luna, and I was facilitating the discussion during the event.

Magazine and Newsletter Articles

Mag.5   Laleh Nourian [G], Yulia Goldenberg [G], Muhammad Adamu, and **Garreth W. Tigwell**. 2025. A Reflection on Accessibility Research across Cultures and Regions. *SIGACCESS Access. Comput.*, 139, Article 13 (January 2025), 1 pages. https://doi.org/10.1145/3773967.3773980

Mag.4   Jiamin (Carrie) Dai, Benjamin M. Gorman, **Garreth W. Tigwell**, Helena Lyhme [G], Belén Barros Pena, Karyn Mofatt, Celine Latulipe, Valentina Andries, David Cropley, Zach Havens, Abi James, Shivaji Kumar, Anna Rohmann, and Andra Sonea. 2025. Developing a Research Agenda for Accessible Financial Technology. *SIGACCESS Access. Comput.*, 139, Article 11 (January 2025), 1 pages. https://doi.org/10.1145/3773967.3773978

Mag.3   Kristen Shinohara and **Garreth W. Tigwell**. 2021. Why getting more people with disabilities developing technology is good for everyone. *The Conversation*. June 3, 2021. https://theconversation.com/why-getting-more-people-with-disabilities-developing-technology-is-good-for-everyone-159619
- Picked up by well-known publishers such as Fast Company and Salon.
- Actively Learn turned the article into an assignment for middle and high school students: https://reader.activelylearn.com/authoring/preview/4023344/notes

Mag.2   **Garreth W. Tigwell**, Zhanna Sarsenbayeva, Benjamin M. Gorman, David R. Flatla, Jorge Goncalves, Yeliz Yesilada, and Jacob O. Wobbrock (2020). Future Directions for Situationally Induced Impairments and Disabilities Research. *Interactions*. ACM.

Mag.1   Cole Gleason, Patrick Carrington, Lydia B. Chilton, Benjamin M. Gorman, Hernisa Kacorri, Andrés Monroy-Hernández, Meredith Ringel Morris, **Garreth W. Tigwell**, and Shaomei Wu. 2020. Future research directions for accessible social media. SIGACCESS Access. Comput., 127, Article 3 (June 2020), 12 pages. DOI: 10.1145/3412836.3412839

Interviews and Media Appearances

Int.4   Haptics DAO. "Accessibility of Crypto". Host: Mona Rassouli. Guests: **Garreth W. Tigwell** and Benjamin M. Gorman. https://youtu.be/OIPtsEkj6ho August 8, 2023.

Int.3   Emilia Morano-Williams and Pia Benthien. "Technology's Adaptive Outlook: Disability Futures". *Stylus*. April 17, 2023. https://stylus.com/technology/technology-s-adaptive-outlook-disability-futures
- Kristen Shinohara and I were asked our thoughts on the topic and are quoted.

Int.2   Work Check. S3:EP4 "Do emojis belong in the workplace? 👍 👎". Host: Christine Dela Rosa. Guests: Esha Shandilya, **Garreth W. Tigwell**, Tomoko Yokoi. https://www.atlassian.com/blog/podcast/work-check/season/season-3/do-emojis-belong-in-the-workplace April 18, 2023.

Int.1   Freedom Scientific Official Podcast. Episode "FSCast 202" discussing emoji accessibility. Host: Glen Gordon. Interviewees: **Garreth W. Tigwell** and Benjamin M. Gorman. https://blog.freedomscientific.com/fscast-202-financial-educator-chris-peterson-plus-emoji-accessibility-with-garreth-tigwell-and-benjamin-gorman/ July 28, 2021.

Invited Talks

2025   "*How We Can Improve Accessible Design*". Graduate course CSC 412 (Human Computer Interaction) at the University of Rochester. November 13, 2025.

2025   "*Building the Future with Accessible Design*". Mercari R4D. April 9, 2025.

2025   "*Support Accessible Design Practice in Research and Industry*". Center for Advancing Scholarship to Transform Learning (CASTLE) Journal Club at the Rochester Institute of Technology. February 4, 2025.

2024   "*Designing Surveys and Making the Most Out of Qualtrics*". GCCIS PhD Colloquium Series at the Rochester Institute of Technology. October 4, 2024.

2024   "*Addressing the Big Challenge of Inaccessible Design*". Accessibility Lunch Talk Series at Carnegie Mellon University. March 11, 2024.

2023   "*Design Tools for Accessible Design*". Neuroscience Seminar at the Rochester Institute of Technology. November 10, 2023.

2023   "*Accessible Design Research and HCI*". Munsell Color Science Lab Meeting at the Rochester Institute of Technology. February 2, 2023.

2023   "*Utilizing the Experience Sampling Method for More Ecologically Valid Qualitative Data Collection*". AWARE-AI NSF Research Traineeship Winter Retreat at the Rochester Institute of Technology. January 18, 2023.

2022   "*From a Psychology Degree to Research in Accessibility and Human-Computer Interaction*". Psychology External Seminar Series at the University of Dundee. December 1, 2022.

2022   "*Ensuring Academic Papers are Accessible*". RIT Library's Scholarship in the 21st Century series (Improving Accessibility in Digital Publishing) at the Rochester Institute of Technology. October 20, 2022.

2022   "*Understanding Current Accessible Design Challenges and How We Can Address the Issue*". Clemson Computing Inclusion and Identity program (CCII) and School of Computing Seminar Speaker Series at Clemson University. October 7, 2022.

2022   "*Let's Talk Accessible Design*". HCI workshop iSchool at Syracuse University. August 5, 2022.

2022   "*Addressing the Issue of Inaccessible Design*". UCLIC Research Seminar Series at the University College London. March 2, 2022.

2022   "*Emoji Accessibility*". Emoji Research Reading Group at Google. January 26, 2022.

2021   "*Supporting Digital Designers in Creating Accessible Content*". GCCIS PhD Colloquium Series at the Rochester Institute of Technology. April 30, 2021.

2021   "*Future Interactions*". The User Experience Club at the Rochester Institute of Technology. April 29, 2021.

2020   "*Improving Accessibility and Usability Through Design*". Guest Lecture Talk for the undergraduate Introduction to HCI course at the University of Rochester. November 18, 2020.

2020   "*Surviving an Unknown Future by Focusing on Research at the End of a PhD*". GCCIS PhD Colloquium Series at the Rochester Institute of Technology. February 21, 2020.

2019   "*Supporting People Through Research*". Seminar Talk at Bournemouth University. April 5, 2019.

2018   "*Improving Content Design on Mobile Devices to Reduce Situational Visual Impairments*". PhD Mentor Talk. Scottish Informatics and Computer Science Alliance HCI Doctoral Consortium held at Robert Gordon University. June 27, 2018.

Doctoral Consortia (Student Participant)
2016   Scottish Informatics and Computer Science Alliance HCI Doctoral Consortium at the University of Strathclyde. June 29, 2016.

2015   Scottish Informatics and Computer Science Alliance HCI Doctoral Consortium at the University of Dundee. August 24, 2015.

Service to Profession

Conference Program and Organizing Committees

2026   **Program Committee**, Subcommittee Co-Chair (SC), Technical Papers, The ACM CHI Conference on Human Factors in Computing Systems, Barcelona, Spain.

2025   **Program Committee**, Technical Papers and Poster Papers, The 27th International ACM SIGACCESS Conference on Computers and Accessibility, Denver, Colorado, USA.

2025   **Chair**, Publicity, The 27th International ACM SIGACCESS Conference on Computers and Accessibility, Denver, Colorado, USA.

2025   **Program Committee**, Associate Chair (AC), Technical Papers, The ACM CHI Conference on Human Factors in Computing Systems, Yokohama, Japan.

2024   **Co-Chair**, Posters and Demos, The 26th International ACM SIGACCESS Conference on Computers and Accessibility, St John's, Canada.

2024   **Program Committee**, Associate Chair (AC), Technical Papers, The ACM CHI Conference on Human Factors in Computing Systems, Hawaii, USA.

2023   **Judge**, Student Research Competition, The ACM CHI Conference on Human Factors in Computing Systems, Hamburg, Germany

2023   **Program Committee**, Associate Chair (AC), Technical Papers, The ACM CHI Conference on Human Factors in Computing Systems, Hamburg, Germany.

2022   **Co-Chair**, Experience Report, The 24th International ACM SIGACCESS Conference on Computers and Accessibility, Athens, Greece.

2022   **Co-Chair**, Accessibility, The ACM CHI Conference on Human Factors in Computing Systems, New Orleans, Louisiana, USA.

2021   **Chair**, Proceedings, The 23rd International ACM SIGACCESS Conference on Computers and Accessibility, Virtual (due to COVID-19).

2021   **Co-Chair**, App & e-Rights, The 2021 ACM CHI Conference on Human Factors in Computing Systems, Virtual (due to COVID-19).

2020   **Co-Chair**, Doctoral Consortium, The 22nd International ACM SIGACCESS Conference on Computers and Accessibility, Virtual (due to COVID-19).

2020   **Program Committee**, Technical Papers and Poster Papers, The 22nd International ACM SIGACCESS Conference on Computers and Accessibility, Virtual (due to COVID-19).

2019   **Program Committee**, Associate Chair (AC), Late Breaking Work, The ACM CHI Conference on Human Factors in Computing Systems, Glasgow, Scotland.

2018   **Program Committee**, Associate Chair (AC), Late Breaking Work, The ACM CHI Conference on Human Factors in Computing Systems, Montréal, Canada.

2017   **Organizing Committee**, Scottish Informatics and Computer Science Alliance PhD Conference.

2017   **Senior Co-Chair**, University of Dundee Computing PhD Symposium.

2016   **Junior Co-Chair**, University of Dundee Computing PhD Symposium.

Conference Student Volunteer

2019   **Student Volunteer**, Accessibility and Aging subcommittee Program Committee meeting, The ACM CHI Conference on Human Factors in Computing Systems, Glasgow, Scotland.

2018   **Student Volunteer**, Various Roles, The 20th International ACM SIGACCESS Conference on Computers and Accessibility, Galway, Ireland.

2018   **Student Volunteer**, Various Roles, The ACM CHI Conference on Human Factors in Computing Systems, Montréal, Canada.

2017   **Student Volunteer**, Various Roles, The ACM CHI Conference on Human Factors in Computing Systems, Denver, Colorado.

Mentoring

2021   **Accessibility Mentor**, offer advice to students taking part in Columbia University's premier student-led annual diversity hackathon called DivHacks. Virtual, Columbia University. October 9, 2021.

2018   **Senior PhD Mentor**, offer advice and support to the PhD students in attendance, Scottish Informatics and Computer Science Alliance HCI Doctoral Consortium held at Robert Gordon University. June 27, 2018.

Editorial & External Reviewing (2015-Present) - *Note: Conference program committee work is listed above.*

- Guest Editor for a Special Issue on Spatial Computing as part of the journal Behaviour & Information Technology. Currently ongoing; October 2024 – present.
- I have been an external reviewer for papers from the following venues: ACM ASSETS, ACM CHI, ACM CSCW, ACM DIS, ACM ISS, ACM MobileHCI, ACM Transactions on Accessible Computing (TACCESS), ACM Transactions on Computer-Human Interaction (TOCHI), Graphic Interface (GI), International Journal of Human–Computer Interaction (IJHCI), International Journal of Human-Computer Studies (IJHCS), Universal Access in the Information Society.

Service to Department/School/College/University

August 2019 – present, RIT

2025 – Present   **Course lead**, HCIN-610 Foundations of HCI, School of Information, Golisano College of Computing and Information Sciences, RIT. School-level. August 2025 – present.

2022 – Present   **Course lead**, HCIN-700 Current Topics in HCI, School of Information, Golisano College of Computing and Information Sciences, RIT. School-level. May 2022 – present.

2019 – Present   **Chair**, Increasing Undergraduate Students' Engagement in Research. School of Information, GCCIS, RIT. School-level. October 2019 – present.

2019 – Present   **Faculty Member**, Computing and Information Sciences Ph.D. Department, GCCIS, RIT. College-level. October 2019 – present.

2019 – Present   **Core faculty Member**, HCI/HCC faculty meetings to keep HCI-MS and HCC-BS program updated/relevant. School of Information, GCCIS, RIT. School-level. October 2019 – present.

2024 – 2025   **Committee Member**, PhD Curriculum Committee. Golisano College of Computing and Information Sciences, RIT. College-level. February 2024 – May 2025.

2024 – 2025   **Course lead**, HCIN-630 Usability Testing, School of Information, Golisano College of Computing and Information Sciences, RIT. School-level. August 2024 – May 2025.

2023 – 2025   **Committee Member**, GCCIS Outstanding Scholar Award. Golisano College of Computing and Information Sciences, RIT. College-level. November 2023 – May 2025.

2022 – 2025   **Course lead**, HCIN-620 Information and Interaction Design, School of Information, Golisano College of Computing and Information Sciences, RIT. School-level. September 2022 – May 2025.

2023 – 2024   **Organizer**, iSchool Insights (I^2) Faculty Talk Series. School of Information, GCCIS, RIT. School-level. September 2023 – April 2024.

2020 – 2024   **Course lead**, HCIN-610 Foundations of HCI, School of Information, Golisano College of Computing and Information Sciences, RIT. School-level. May 2020 – August 2024.

2023 – 2023   **Committee Member**, GCCIS Outstanding Educator Award. Golisano College of Computing and Information Sciences, RIT. College-level. March 2023 – April 2023.

2023 – 2023   **Committee Member**, iSchool Retention Committee. School of Information, GCCIS, RIT. School-level. January 2023 – April 2023.

2022 – 2023   **Committee Member**, iSchool Tenure-Track HCI Faculty Search. School of Information, GCCIS, RIT. School-level. September 2022 – February 2023.

2021 – 2022   **Committee Member**, iSchool Tenure-Track HCI Faculty Search. School of Information, GCCIS, RIT. School-level. August 2021 – April 2022.

2021   **Committee Member**, Ad Hoc Committee to identify UX Resources for the usability lab, School of Information, Golisano College of Computing and Information Sciences, RIT. School-level. Fall 2021.

2020 – 2022   **Committee Member**, 20th Anniversary Celebration Committee. Golisano College of Computing and Information Sciences, RIT. College-level. March 2020 – March 2022.

2020 – 2022   **Committee Member**, Digital Capstone Committee. School of Information, Golisano College of Computing and Information Sciences, RIT. School-level. March 2020 – May 2022.

March 2012 – May 2019, University of Dundee

2019   **Judge**, Annual Computing PhD Symposium, Discipline of Computing, School of Science and Engineering, University of Dundee. Department-level. May 2019.
- *I was invited to be an academic judge for the University of Dundee's Computing PhD Symposium. The panel was tasked with selecting the best presentations by a non-transfer student (PhD Student) and a transfer student (PhD Candidate).*

2016 – 2019   **Committee member**, Computing Ethics Committee, Discipline of Computing, School of Science and Engineering, University of Dundee. Department-level. October 2016 – February 2019.
- *I reviewed human subjects research proposals to ensure they were ethically appropriate with controlled risks, and then inform the chair of my decision on whether the research can take place or if amendments were required. I also mentored new members of the committee.*

2012   **Volunteer**, Alternative Formats, Library, University of Dundee. University-level. March 2012 – May 2012.
- *I volunteered with the Alternative Formats service to convert resources (e.g., books) into a different medium for students who had physical and/or visual impairments.*

2011 – 2012   **Mentor**, fourth year psychology undergraduate mentor, School of Psychology, University of Dundee. School-level. September 2011- July 2012.
- *The psychology mentor system was set up to encourage interaction between the different years in the School of Psychology. In 4th year, I was a mentor to psychology undergraduate students in earlier years to provide academic and personal advice and support.*

Teaching

Rochester Institute of Technology

Instructor, School of Information

2026   HCIN-600 *Research Methods*, graduate course delivered online. Spring 2026.
2025   HCIN-794 *MS HCI Capstone Proposal*, graduate course delivered in-person. Fall 2025.
2025   ISTE-798 *Future Interactions*, graduate course delivered in-person. Spring 2025.
2024   HCIN-794 *MS HCI Capstone Proposal*, graduate course delivered in-person. Fall 2024.
2024   ISTE-798 *Future Interactions*, graduate course delivered in-person. This is a course I created. Spring 2024.
2023   HCIN-600 *Research Methods*, graduate course delivered in-person. Fall 2023.

2023   ISTE-266 *Design for Accessibility*, undergraduate course delivered in-person. Spring 2023.

2022   HCIN-620 *Information and Interaction Design*, graduate course delivered in-person. Fall 2022.

2022   HCIN-630 *Usability Testing*, graduate course delivered in-person. Spring 2022.

2021   HCIN-600 *Research Methods*, graduate course delivered in a hybrid format (online/in-person). Fall 2021.

2021   HCIN-700 *Current Topics in HCI*, graduate course delivered online. Spring 2021.

2020   HCIN-610 *Foundations of Human-Computer Interaction*, graduate course delivered in a hybrid format (online/in-person). Fall 2020.

2020   HCIN-700 *Current Topics in HCI*, graduate course delivered online. Spring 2020.

2019   HCIN-610 *Foundations of Human-Computer Interaction*, graduate course delivered in-person. Fall 2019.

Guest Instructor/Presenter, School of Information

2025   ISTE-99 BS School of Information Second Year Seminar, undergraduate-level course delivered in-person. Presentation on how to work with faculty on research projects. Fall 2025.

2025   ISTE-99 BS School of Information Second Year Seminar, undergraduate-level course delivered in-person. Presentation on how to work with faculty on research projects. Spring 2025.

2024   ISTE-99 BS School of Information Second Year Seminar, undergraduate-level course delivered in-person. Presentation on how to work with faculty on research projects. Fall 2024.

2024   HCIN-600 Research Methods, graduate-level course delivered in-person. Covered class. Fall 2024.

2024   ISTE-99 BS School of Information Second Year Seminar, undergraduate-level course delivered in-person. Presentation on how to work with faculty on research projects. Spring 2024.

2023   ISTE-99 BS School of Information Second Year Seminar, undergraduate-level course delivered in-person. Presentation on how to work with faculty on research projects. Fall 2023.

2023   HCIN-794 MS Human-Computer Interaction Capstone Proposal, graduate-level course delivered in-person. Presentation on my research and optional student projects. Fall 2023.

2023   ISTE-99 BS School of Information Second Year Seminar, undergraduate-level course delivered in-person. Presentation on how to work with faculty on research projects. Spring 2023.

2022   ISTE-99 BS School of Information Second Year Seminar, undergraduate-level course delivered in-person. Presentation on how to work with faculty on research projects. Fall 2022.

2022   HCIN-600 Research Methods, graduate-level course delivered in-person. Presentation on running surveys. Fall 2022.

2022   HCIN-794 MS Human-Computer Interaction Capstone Proposal, graduate-level course delivered in-person. Presentation on my research and optional student projects. Fall 2022.

2021   HCIN-794 MS Human-Computer Interaction Capstone Proposal, graduate-level course delivered in-person. Presentation on my research and optional student projects. Fall 2021.

2020   ISTE-99 BS School of Information Second Year Seminar, undergraduate-level course delivered online. Presentation on how to work with faculty on research projects. Fall 2020.

2019   HCIN-794 MS Human-Computer Interaction Capstone Proposal, graduate-level course delivered in-person. Presentation on my research and optional student projects. Fall 2019.

2019   HCIN-600 Research Methods, graduate-level course delivered in-person. Presentation on running surveys. Fall 2019.

University of Dundee

Various Roles (teaching, grading, etc.), Discipline of Computing

2015-19   HCI, Programming, Research, UX, and Web courses. Mix of graduate/undergraduate students and in-person/online format.

Student Advising, Committees, Mentorship

PhD Student Advisees

2. **Sarah Andrew**, Computing & Information Sciences, RIT. August 2021 to present. Proposal defended June 2024.

1. **Laleh Nourian**, Computing & Information Sciences, RIT. January 2021 to present. Proposal defended November 2024.

Dissertation Committee / External Examiner

11. **Sanzida Mojib Luna**, Computing & Information Sciences, RIT. On committee from November 2025 to present. Proposal defended December 2025.

10. **Muhammad Raees**, Computing & Information Sciences, RIT. On committee from November 2025 to present. Proposal defended December 2025.

9. **Bryan Amador**, Computing & Information Sciences, RIT. On committee from October 2025 to present. Proposal defended December 2025.

8. **Jiangnan Xu**, Computing & Information Sciences, RIT. On committee from October 2024 to present. Proposal defended January 2025.

7. **Emily Kuang**, Computing & Information Sciences, RIT. On committee from April 2023 to present. Dissertation defended May 2025.

6. **John Dunham**, Computing & Information Sciences, RIT. On committee from October 2022 to May 2024. Dissertation defended May 2024.

5. **Samine Hadadi,** University of Sydney. Thesis reviewed April 2024.

4. **Saad Hassan**, Computing & Information Sciences, RIT. On committee from October 2022 to May 2023. Dissertation defended May 2023.

3. **Matthew Seita**, Computing & Information Sciences, RIT. On committee from October 2021 to April 2023. Dissertation defended April 2023.

2. **Oliver Alonzo**, Computing & Information Sciences, RIT. On committee from August 2021 to April 2023. Dissertation defended April 2023.

1. **Sovantharith Seng**, Computing & Information Sciences, RIT. On committee from November 2019 to July 2022.

Research Potential Assessment (Qualifier) Committee Member

9. **Ester C. Chen**, Computing & Information Sciences, RIT. Completed May 2025.

8. **Paul Chukwuemeka Ezeamii**, Computing & Information Sciences, RIT. Completed May 2024.

7. **Sanzida Mojib Luna**, Computing & Information Sciences, RIT. Completed May 2023.

6. **Ziming Li**, Computing & Information Sciences, RIT. Completed May 2022.

5. **Caluã de Lacerda Pataca**, Computing & Information Sciences, RIT. Completed May 2022.

4. **Murtaza Tamjeed**, Computing & Information Sciences, RIT. Completed May 2021.

3. **Xiaofu Jin**, Computing & Information Sciences, RIT. Completed May 2021.

2. **Abraham Glasser**, Computing & Information Sciences, RIT. Completed May 2020.

1. **Saad Hassan**, Computing & Information Sciences, RIT. Completed May 2020.

M.S. Student Advisees (Capstones/Theses)

38. **Nidhi Bangera**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Designing a Framework for Visualizing and Understanding LLM Tone Across Cultures*". Proposal being finalized. November 2025 – present.

37. **Shreya Patil**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Developing Usability Heuristics for Evaluation of Hindi-Localized E-Commerce Interfaces in India*". Proposal signed. November 2025 – present.

36. **Prasoon Naithani**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Evaluating the Accessibility Impact of Ready-to-Use Components in Modern UI Frameworks Used by Novice and Expert Developers*". Proposal signed. November 2025 – present.

35. **Anisa Callis**, Human-Computer Interaction M.S. student, RIT. Thesis: "Supporting Student Designers with ADHD: Toward Inclusive Tools and Frameworks for Creative Workflows". Proposal signed. August 2025 – present.

34. **Sidney Grabosky**, Human-Computer Interaction M.S. student, RIT. Thesis: "*Beyond the SmartWatch: A Design Space Exploration of Near-Wrist Bioacoustic On-Skin Interactions*". Proposal signed. August 2025 – present.

33. **Vrunda Kamlesh Mange**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Evaluating the Impact of AI Assistance on Early-Career UI/UX Designers during Adaptive Website Design using a Simulated AI-Powered Figma Plugin*". Proposal signed. April 2025 – present.

32. **Kshitij Shetty**, Human-Computer Interaction M.S. student, RIT. Capstone: "*The Impact of Language Change on Interface Design: Creating Accessible Multilingual and BiDi UIs*". 2024 to 2025. Defended: December 2025.

31. **Meghna Anand**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Accessible design for Designers: A study on the availability and support of accessibility guidelines for UI/UX designers*". 2024 to 2025. Defended: December 2025.

30. **Mehek Somai**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Building a Designer's Tool for Accessible Typography: A Resource for Informed Font Selection*". Proposal signed. 2024 to 2025. Defended: May 2025.

29. **Shreya Shah**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Redesigning Onboarding Techniques for Wireframing Tool to Improve First-Time User Experience*". Proposal signed. 2024 to 2025. Defended: May 2025.

28. **Vinaya Hanumant Naikar**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Impact of AR-based Virtual Try-On for Wheelchair Users*". 2023 to 2024. Defended: November 2024.

27. **Anila Durbha**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Exploring the Influence of Cultural Background on User Experience Designers: A Comparative Study between Indian and American Designers*". 2023 to 2024. Defended: November 2024.

26. **Rahul Vinod Malgundkar**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Understanding the Experience of People Who Use Braille Devices During Computer-Mediated Communication*". 2023 to 2024. Defended: November 2024.

25. **Rohit Ramesh**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Beyond the Lens: Understanding photographer's use of alt text and supporting alt text implementation*". 2023 to 2024. Defended: October 2024.

24. **Tejaswini Chalicheemala**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Prototype Tool to Find Accessible Gradient Colors and Contrast Ratios for Image Backgrounds*". 2023 to 2024. Defended: April 2024.

23. **Cong Wang**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Exploring User Experience of Web Applications in Virtual Try-on for Glasses*". 2023 to 2024. Defended: April 2024.

22. **Anna Jacobsen**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Experiences of the Blind Community with Smart Retail Technology*". 2021 to 2024. Defended: March 2024.

21. **Chin-Lan Chiang**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Perspectives Regarding Digital Design Tools from Users with Color Vision Deficiency*". 2022 to 2023. Defended: October 2023.

20. **Shwetha Subramanian**, Human-Computer Interaction M.S. student, RIT. Capstone: "*How to ensure users smoothly transition out of virtual environments when using a VR headset*". Proposal signed. 2022 to 2023. Defended: May 2023.

19. **Sucheer Rao**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Understanding the Accessibility Practices of Social Media Managers at Universities for Blind and Low Vision Users*". 2022 to 2023. Defended: May 2023.

18. **Juliann Thang**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Designing Effective Digital Wellbeing Methodologies*". 2022 to 2023. Defended: April 2023.

17. **Sagarika Verma,** Human-Computer Interaction M.S. student, RIT. Capstone: "*Donation Hero: a mobile application for identifying and notifying donors of fraudulent crowdfunding websites for a worry-free donation in India*". 2022. Defended: December 2022.

16. **Ajay Chaudhary**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Understanding Buying Intentions and Privacy Concerns of Users While Using AR Makeup Mirror In Their Own Homes*". 2021 to 2022. Defended: December 2022.

15. **Jiaxuan Sun**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Accessibility for Blind People Interaction with Household Surfaces*". 2021 to 2022. Defended: December 2022.

14. **Emily Lederman**, Human-Computer Interaction M.S. student, RIT. Capstone: "*The Usability of TikTok Captions*". 2021 to 2022. Defended: June 2022.

13. **Ian Mackenzie**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Redesigning an Outdated Training System for ITS at RIT*". 2021 to 2022. Defended: April 2022.

12. **Nisanth Rajavelu**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Don't let the dogs out: Online dog adoption using persuasive design technology in India*". 2021 to 2022. Defended: April 2022.

11. **Urvashi Kokate**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Evaluating the Accessibility Check Features in Popular Prototyping tools*". 2020 to 2021. Defended: December 2021.

10. **Esha Shandilya**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Role of Non-textual Communication in Developing Interpersonal Bonds in Virtual Workspaces*". 2020 to 2021. Defended: July 2021.

9. **Ma' kiah Holliday**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Providing College Students Safe Access to On-Campus Food Pantry Post COVID-19*". 2020 to 2021. Defended: May 2021.

8. **Ralph Thelusma**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Factors contributing to poor alphanumeric password authentication practices among military members on overseas assignments stationed in Vilseck, Germany*". 2020 to 2021. Defended: May 2021.

7. **Sarah Andrew**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Designing for Mobile Authentication Situational Impairments caused by COVID-19 Preventions*". 2020 to 2021. Defended: April 2021.

6. **Athira Pillai**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Withstanding an Increasingly Inaccessible Web: Incorporating Accessibility into Website Builders*". 2020 to 2021. Defended: April 2021.

5. **Xinyue Zhang**, Human-Computer Interaction M.S. student, RIT. Capstone: "*An Educational System for Exploring and Understanding Situational Visual Impairments*". 2019 to 2020. Defended: August 2020.

4. **Alexandra Hannaway**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Developing Context Driven Messaging Aids with User-Centered Design to Improve Online Dating Conversations*". 2020 to 2020. Defended: July 2020.

3. **Hui-yu Ho**, Human-Computer Interaction M.S. student, RIT. Capstone: "*ACE 2.0: Digital Design Tool to Help Designers Increase Visual Accessibility*". 2019 to 2020. Defended: July 2020.

2. **Liam Kiniry**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Alt-Text Supplemented by Social Media Crowdsourcing: Closing Gaps in Social and Contextual Understanding of Memes*". 2019 to 2020. Defended: April 2020.

1. **Trinh Le**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Desired Features and Capabilities of Assistive Mobile Technology for Self-Regulating Anxiety*". 2019 to 2020. Defended: April 2020.

M.S. Student Committee Member (Capstones/Theses)

27. **Sarah Tang**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Understanding How Novice Golfers Interpret and Trust AI-Generated Swing Feedback*". Proposal being finalized. December 2025 – present

26. **Colby Geary**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Understanding How Novice Golfers Interpret and Trust AI-Generated Swing Feedback*". Proposal signed. December 2025 – present.

25. **Tanvi Chandan**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Human–AI Collaboration in Design: Comparing Text and Visual Based Transparency Cues to Support Designer Trust and Understanding*". Proposal signed. December 2025 – present.

24. **Andrew Ratayczak**, Human-Computer Interaction M.S. student, RIT. Thesis: *"Dismantling Accessibility Barriers Between Visually Impaired Social Media Users and Digital Art"*. Proposal signed. February 2025 – present.

23. **Haet Ranpariya**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Designing and Evaluating Usability of AI-Enhanced Context-Aware Adaptive User Interfaces for Mobile App Library/Drawer*". Proposal signed. April 2025 – present.

22. **Wajiha Fatima Bhura**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Evaluating a Simulated AI-Powered Smart Card System for Research-Driven Skimming: Section-Based Key Point Extraction, Goal-Aligned Labeling, Research Relevance, and Citation Retrieval in Empirical HCI Papers*". Proposal signed. April 2025 – present.

21. **Michelle Olson**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Enhancing Authenticity in HCI Research with Deaf Participants: The Role of Deaf Moderators and Culturally Aligned Communication*". Proposal signed. January 2025 – present.

20. **Bea Marithe Pulido**, Experimental Psychology M.S. student, RIT. Thesis: "*Voice-User-Interface Usability in Older Adults*". Joined committee in November 2024. November 2024 – Present.

19. **Sachin Bajpai**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Mindful Scrolling: Evaluating a Digital Nudge Intervention on Instagram*". 2025. Defended: December 2025.

18. **Avery Mavrovounioti**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Exploring the Integration of Assistive Technologies into Mainstream Products: Investigating Preferences and Usage in the d/DHH Community*". 2025. Defended: December 2025.

17. **Nikita Bhyri**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Guiding Green Choices: The Impact of Personalized Digital Nudges on Sustainable Consumer Behavior in E-commerce*". 2024 to 2025. Defended: December 2025.

16. **Radhika Kolhekar**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Understanding User Trust in Voice Assistants and Error Handling Strategies*". 2024 to 2025. Defended: December 2025.

15. **Mililani Rosare**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Learning about and Designing Physical Assistive Technology for Upper-body Motor Impairment Individuals*". Proposal signed. 2023 to 2025. Defended: February 2025.

14. **Liya Thomas**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Intersectionality of Disability and Race within Automatic Speech Recognition applications and DHH Black American Older Adults*". 2024. Defended: November 2024.

13. **Roshan Mathew**, Human-Computer Interaction M.S. student, RIT. Capstone: "*DHH Perspectives on AR/MR-based Interfaces for Improving Accessibility of Voice-based Interactions*". 2021 to 2024. Defended: May 2024.

12. **Kripa Kundaliya**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Accessible Design Methods - Ideation and Sketching with Blind, Low Vision and Sighted Participants*". 2022 to 2024. Defended: May 2024.

11. **Pranavi Chitti**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Case Study: Examining Accessibility of the Design Process for a Blind or Low-Vision UX Professional*". 2023 to 2024. Defended: April 2024.

10. **Kassandra Chin**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Exploring the Feasibility and Usability of Lip, Face, and Head Gestures as In-Car Input Methods*". 2023 to 2024. Defended: April 2024.

9. **Palavi Vinod Bhole**, Human-Computer Interaction M.S. student, RIT. Thesis: "*Exploring Authentication Methods for Blind and Low Vision Users using Haptic Feedback in Wearable Devices*". 2022 to 2023. Defended: December 2023.

8. **Chloe Keilers**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Study on current data visualization accessibility for blind audience*". 2021 to 2022. Defended: June 2022.

7. **Roshni Wadhwa**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Recommending Guidelines for a Holistic Solution to Simplify the Process of Onboarding Incoming Students*". 2021. Defended: December 2021.

6. **Madhura Valvaikar**, Human-Computer Interaction M.S. student, RIT. Capstone: "*An automated system for managing Grab-and-Go meals at a college cafeteria*". 2021. Defended: December 2021.

5. **Dymen Barkins**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Accessible Design: Exploring the Ideation and Sketching Process with Blind/Low-Vision Individuals*". 2021. Defended: December 2021.

4. **Manisha Varma Kamarushi**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Haptic Authentication: One-touch Authentication for Blind/low vision users to mitigate Shoulder-Surfing Attacks*". 2020 to 2021. Defended: September 2021.

3. **Becca Dingman**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Creating Accessible Podcasts: A platform for transcribing podcasts*". 2020 to 2021. Defended: May 2021.

2. **Wenhao Luebs**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Making Sketching Activity Accessible to Blind and Low-Vision People in User Experience Design*". 2019 to 2020. Defended: November 2020.

1. **Junchen Li**, Human-Computer Interaction M.S. student, RIT. Capstone: "*Using Prototyping Tools via Screen Reader Software: Usability and Accessibility Issues*". 2019 to 2020. Defended: April 2020.

Independent Study Advisees

3. **Laleh Nourian**, PhD student in Computing & Information Sciences, RIT. Project: "*Understanding Accessibility Education in Iranian Courses*". August 2022 – December 2022.

2. **Anna Jacobsen,** Human-Computer Interaction M.S. student, RIT. Project: "*Understanding the experiences of blind people using smart retail technology*". January 2022 – April 2022.

1. **Bryan Basham,** M.S. student in School of Individualized Study, RIT. Project: "*Improving the Student User Experience of an Experimental Learning Management System*". May 2020 – December 2020.

Research Assistants (undergraduate and graduate students)

17. **Maya Lane**, Human-Computer Interaction M.S. student, RIT. October 2025 – Present.

16. **Anisa Callis**, Human-Computer Interaction M.S. student, RIT. Awarded iSchool GRA for academic year 2025-26. October 2024 – Present.

15. **Dewel Gonzalez Jr.**, Computing and Information Technology B.S. student, RIT. September 2024 – May 2025.

14. **Vrunda Kamlesh Mange**, Human-Computer Interaction M.S. student, RIT. August 2024 – May 2025.

13. **Meghna Anand**, Human-Computer Interaction M.S. student, RIT. Awarded iSchool GRA for academic year 2024-25. September 2023 – May 2025.

12. **Tiana Daye**, Human-Centered Computing B.S. student, RIT. Awarded support through The Collegiate Science and Technology Entry Program for a semester of research experience. August 2024 – December 2024.

11. **Toni D'Aurio**, American Sign Language and Interpreting Education B.S. student, RIT. October 2023 – April 2024.

10. **Katie Qian**, Human-Centered Computing B.S. student, RIT. Awarded IUSER RA funding through iSchool for academic year 2023-24. August 2023 – May 2024.
    Note: Katie's was awarded a 2025 Undergraduate Research Scholar graduate recognition.

9. **Riley Basile-Benson**, Computing and Information Technologies B.S. student, RIT. Awarded IUSER RA funding through iSchool for academic year 2023-24. August 2023 – May 2024.

8. **Emma Edgar**, Human-Centered Computing B.S. student, RIT. June 2023 – May 2024.

7. **Vinaya Hanumant Naikar**, Human-Computer Interaction M.S. student, RIT. Awarded iSchool GRA for academic year 2023-24. September 2022 – May 2024.

6. **Shwetha Subramanian**, Human-Computer Interaction M.S. student, RIT. Awarded iSchool GRA for academic year 2022-23. October 2021 – May 2023.

5. **Nash Lyke**, Human-Computer Interaction M.S. student, RIT. Awarded iSchool GRA for academic year 2021-22. August 2021 – May 2022.

4. **Renee Bogdany**, Human-Centered Computing B.S. student, RIT. Supporting ongoing lab projects. January 2022 – April 2022.

3. **Chelsea Bishop**, Human-Centered Computing B.S. student, RIT. Supporting ongoing lab projects. August 2021 – April 2022.

2. **Shantanu Jamble**, Game Design and Development M.S. student, RIT. January 2020 – April 2020.

1. **Sarah Andrew**, Human-Computer Interaction M.S. student, RIT. Awarded iSchool GRA for academic year 2020-21. September 2019 – May 2021.

Advising roles undertaken during my PhD studies at the University of Dundee
From 2014-2018 I co-advised two final year undergraduate students, one graduate student, and three high school students on a Nuffield Research Placement. Two publications resulted from this [J.1, P.1].

Outreach and Public Engagement

2018   I helped demo BrightLights to an industry audience attending the Scottish Informatics and Computer Science Alliance's DemoFest. Developed by University of Dundee undergraduate student Kerr Macpherson. Dynamic Earth, Edinburgh, November 6, 2018.

2014 – 2018   Volunteer for Computing University of Dundee Strathmore Trophy. The Strathmore Trophy competition is an annual event that began in 1996. S1/S2 level high school students are invited to take part in a computing-related challenge. Previous challenges include designing "Technology T-Shirts", "Smart Watch Applications", and "Authentication Invulnerable to Shoulder Surfing".

2014 – 2018   Open Days Speaker and Lab Demonstrations for the Discipline of Computing, University of Dundee.

2018   Judging for Angus Games Con 2018 at Computing, University of Dundee. Teams from 3 primary schools were invited to create a game/animation on the topic of staying safe online and the teams took part in an accessibility coding challenge on the day. May 2018

2017   I helped demo Virtual Virtuoso to an industry audience attending the Scottish Informatics and Computer Science Alliance's DemoFest. Virtual Virtuoso is a VR sandbox for musical exploration using musical metaphors with an immersive experience for novice music creators. Developed by University of Dundee undergraduate student Lewis Davie. Dynamic Earth, Edinburgh, October 3, 2017.

2017   Supporting High School students during a Scratch evening class, University of Dundee. March 2017.

2016   Dundee Science Festival evening technology demonstrations for the public. November 2016.

Professional Memberships

I hold memberships with the ACM, SIGACCESS, and SIGCHI.

Professional Development

2022   Faculty and Staff Sign Language ASL 1A TWA. Instructor: Danielle Graybill, NTID.
2021   Inclusive Hiring Training. Instructor: Dr. Taj Smith, Director of Diversity Education.
2020   Faculty and Staff Sign Language ASL 1B TWA. Instructor: Heather Miller, NTID.
2019   Faculty and Staff Sign Language ASL 1A TWA. Instructor: Heather Miller, NTID.