

# Saad Hassan

ASSISTANT PROFESSOR · TULANE UNIVERSITY

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## Professional Experience

### Tulane University

ASSISTANT PROFESSOR, *Full-time*

- Department of Computer Science, School of Science and Engineering

New Orleans, LA

July 2023 - present

### Rochester Institute of Technology

GRADUATE RESEARCH ASSISTANT, *Part-time*

- Center for Accessibility and Inclusion Research (CAIR) & Linguistics and Assistive Technology Lab

Rochester, NY

August 2019 - May 2023

### Google LLC

STUDENT RESEARCHER, *Part-time*

- Sign Language Understanding Group (SLUG)

Remote (NY)

January 2023 - May 2023

### Meta Platforms, Inc.

STUDENT RESEARCHER, *Part-time*

- Audio Experiences Team at Meta Reality Labs

Remote (NY)

September 2022 - Dec. 2022

### Meta Platforms, Inc.

RESEARCH SCIENTIST INTERN, *Full-time*

- Audio Experiences Team at Meta Reality Labs

Redmond, WA

May 2022 - September 2022

### Google LLC

STUDENT RESEARCHER, *Part-time*

- Google Perception

Remote (NY)

September 2021 - May 2022

### Google LLC

RESEARCH INTERN, *Full-time*

- Google Perception

Remote (NY)

May 2021 - August 2021

## Research Focus

**Computing Accessibility:** Developing and studying interactive systems that address pressing computing accessibility challenges, with a focus on Deaf and Hard of Hearing (DHH) individuals and sign language users. Collection and linguistic annotation of video corpora of American Sign Language (ASL).

**Human-Computer Interaction:** Designing artificial intelligence (AI) systems and conducting experiments involving human participants, exploring the usability of linguistic and accessibility technology for individuals who are Deaf or Hard of Hearing, and designing technology to aid those learning ASL.

**Computational Social Science:** Understanding the impact of sociotechnical linguistic systems, including AI-powered experiences, on people with disabilities using cross-disciplinary theories and methods.

## Research Funding

### FUNDED

Saad Hassan (PI). June 2024 to June 2026. "Enhancing Expressive and Receptive American Sign Language Learning using AI-Powered Tools." Louisiana Board of Regents: Research and Development (RCS). *Ranked 14/120. Amount: \$96,044.*

Saad Hassan (PI). June 2024 to May 2025. "Committee on Research (COR) Fellowships." Tulane University. *Amount: \$5,000.*

Saad Hassan (PI). June 2024 to December 2024. "Faculty Innovation Grant." Tulane University Innovation Institute (TUII). *Amount: \$2,500.*

Saad Hassan (PI), Aaron Gershkovich (Student Researcher). June 2024 to August 2024. "In-situ Text Simplification Tools for Individuals with Low English Literacy." CELT Award for Faculty Mentored Undergraduate Research. Amount: \$1,200.

Saad Hassan (PI), Oscar J Xiao (Student Researcher). June 2024 to August 2024. "Legal Document Reading Support for Native Chinese Speakers." CELT Award for Faculty Mentored Undergraduate Research. Amount: \$1,200.

Saad Hassan (PI), Madeline "Dylan" Murray (Student Researcher). June 2024 to August 2024. "Musical Instrument Digital Interface." CELT Award for Faculty Mentored Undergraduate Research. Amount: \$1,200.

Saad Hassan (PI), Caitlin Chen (Student Researcher). September 2023 to May 2024. "Understanding the Experiences and Technological Needs of Art Therapists." CELT Award for Faculty Mentored Undergraduate Research. Amount: \$2,680.

Saad Hassan (PI), Will Siver Wagman (Student Researcher). September 2023 to December 2024. "Art Appreciator for the Visually Impaired." CELT Award for Faculty Mentored Undergraduate Research. Amount: \$1,580.

Saad Hassan. September 2023 to December 2023. CELT Classroom Enhancement Grant. Amount: \$500.

Saad Hassan. September 2022 to November 2023. "Design and Experimental Evaluation of Sign Language Look-up Tools." Duolingo Research Grant. Amount: \$5,000.

## Research Awards

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**Best Paper Honorable Mention.** (2024). For "Caption Royale: Exploring the Design Space of Affective Captions from the Perspective of Deaf and Hard-of-Hearing Individuals." at the *2024 CHI Conference on Human Factors in Computing Systems (CHI'24)*

**Best Paper Honorable Mention.** (2024). For "Designing and Evaluating an Advanced Dance Video Comprehension Tool with In-situ Move Identification Capabilities" at the *2024 CHI Conference on Human Factors in Computing Systems (CHI'24)*

**Best Paper Award Nomination.** (2022). For "Support in the Moment: Benefits and use of video-span selection and search for sign-language video comprehension among ASL learners" at the *24th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS'22)*

**Duolingo Dissertation Research Award.** (2022). One of the five recipients of award from Duolingo Research to recognize most impactful dissertations on language learning technologies.

**Language Science and Computational Linguistics Student Excellence Award.** (2021). Award from Language Science Curriculum Committee at RIT for excellent research and coursework in natural language processing.

## Education

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### Rochester Institute of Technology

PHD COMPUTING AND INFORMATION SCIENCE

Rochester, NY

August 2019 - May 2023

- Advisor: Dr. Matt Huenerfauth
- Thesis: Exploring Search-by-Video Technology for Searching Structured Human Movements: Insights From Sign Language Look-Up Systems.

### Lahore University of Management Sciences

BS COMPUTER SCIENCE

Lahore, Pakistan

August 2015 - June 2019

## Publications

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### MANUSCRIPTS UNDER SUBMISSION

[M.1] **Saad Hassan**, Laleh Nourian, Caluã de Lacerda Pataca, Michelle M Olson, Toni D'aurio, Kanupriya Agarwal, Syeda Mah Noor Asad, Garreth W. Tigwell, Matt Huenerfauth. 2024. Perceptions of ASL Educators in Higher Education Regarding the Use of AI in American Sign Language Learning. (Submitted to CHI '25 and received positive initial reviews.)

### PEER-REFEREED JOURNAL ARTICLES, PUBLISHED

- [J.3] **Saad Hassan**, Caluã de Lacerda Pataca, Akhter Al Amin, Laleh Nourian, Diego Navarro, Sooyeon Lee, Alexis Gordon, Matthew Watkins, 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.2] **Saad Hassan**, Abraham Glasser, Max Shengelia, Thad Starner, Sean Forbes, Nathan Qualls, and Sam S. Sepah. 2023. Tap to Sign: Towards using American Sign Language for Text Entry on Smartphones. *Proceedings of ACM Human-Computer Interaction* 7, MHCI, Article 227 (September 2023), 23 pages. <https://doi.org/10.1145/3604274>
- [J.1] **Saad Hassan**, Oliver Alonzo, Abraham Glasser, and Matt Huenerfauth. 2021. Effect of Sign-recognition Performance on the Usability of Sign-language Dictionary Search. *ACM Transactions of Accessible Computing* 14, 4, Article 18 (December 2021), 33 pages. <https://doi.org/10.1145/3470650>

## PEER-REFEREED FULL LENGTH PAPERS, PUBLISHED IN CONFERENCE PROCEEDINGS

- [FP.10] **Saad Hassan**, Matyas Bohacek, Chaelin Kim, and Denise Crochet. 2025. Exploring the Design and Usage of an AI-Driven Video-Based American Sign Language Dictionary. Towards an AI-Driven Video-Based American Sign Language Dictionary: Exploring Design and Usage Experience with Learners. [Accepted, Yet to be published]
- [FP.9] Manfred Georg, Garrett Tanzer, Esha Uboweja, **Saad Hassan**, Maximus Shengelia, Sam Sepah, Sean Forbes, Thad Starner. 2025. In Proceedings of the IEEE/CVF international conference on computer vision. (2878/13,008=22.1% papers accepted) [Accepted, Yet to be published. Accepted papers: <https://cvpr.thecvf.com/Conferences/2025/AcceptedPapers>]
- [FP.9] Caluã de Lacerda Pataca, **Saad Hassan**, Lloyd May, Michelle M Olson, Toni D'Aurio, Roshan L Peiris, and Matt Huenerfauth. 2025. Tactile Emotions: Multimodal Affective Captioning with Haptics Improves Narrative Engagement for d/Deaf and Hard-of-Hearing Viewers. In CHI Conference on Human Factors in Computing Systems (CHI'25), April 26-May 1, 2025, Yokohama, Japan. ACM, New York, NY, USA, 17 pages. <https://doi.org/10.1145/3706598.3713304> (1249/5020=25.1% papers accepted) [Accepted, Yet to be published.]
- [FP.8] **Saad Hassan**, Caluã De Lacerda Pataca, Laleh Nourian, Garreth W. Tigwell, Briana Davis, and Will Zhenya Silver Wagman. 2024. Designing and Evaluating an Advanced Dance Video Comprehension Tool with In-situ Move Identification Capabilities. In Proceedings of the CHI Conference on Human Factors in Computing Systems (CHI '24). Association for Computing Machinery, New York, NY, USA, Article 888, 1–19. <https://doi.org/10.1145/3613904.3642710>(1060/4028=26.3% papers accepted)

**Conference Award: Best Paper Honorable Mention (top 5% of submissions)**

- [FP.7] Caluã de Lacerda Pataca, **Saad Hassan**, Nathan Tinker, Roshan Lalintha Peiris, and Matt Huenerfauth. 2024. Caption Royale: Exploring the Design Space of Affective Captions from the Perspective of Deaf and Hard-of-Hearing Individuals. In Proceedings of the CHI Conference on Human Factors in Computing Systems (CHI '24). Association for Computing Machinery, New York, NY, USA, Article 899, 1–17. <https://doi.org/10.1145/3613904.3642258>(1060/4028=26.3% papers accepted)

**Conference Award: Best Paper Honorable Mention (top 5% of submissions)**

- [FP.6] Thad Starner, Sean Forbes, Matthew So, David Martin, Rohit Sridhar, Gururaj Deshpande, Sam Sepah, Sahir Shahryar, Khushi Bhardwaj, Tyler Kwok, Daksh Sehgal, **Saad Hassan**, Bill Neubauer, Sofia Anandi Vempala, Alec Tan, Jocelyn Heath, Unnathi Utpal Kumar, Priyanka Vijayaraghavan Mosur, Tavenner M. Hall, Rajandeep Singh, Christopher Zhang Cui, Glenn Cameron, Sohler Dane, and Garrett Tanzer. 2023. PopSign ASL v1.0: an isolated american sign language dataset collected via smartphones. In Proceedings of the 37th International Conference on Neural Information Processing Systems (NIPS '23). Curran Associates Inc., Red Hook, NY, USA, Article 11, 184–196. <https://doi/10.5555/3666122.3666133>(322/985=32.7% papers accepted)
- [FP.5] Akhter Al Amin, **Saad Hassan**, Sooyeon Lee, and Matt Huenerfauth. 2023. Understanding How Deaf and Hard of Hearing Viewers Visually Explore Captioned Live TV News. In Proceedings of the 20th International Web for All Conference (W4A '23). Association for Computing Machinery, New York, NY, USA, 54–65. <https://doi.org/10.1145/3587281.3587287> (16/32=50% papers accepted)

- [FP.4] **Saad Hassan**, Akhter Al Amin, Caluã de Lacerda Pataca, Diego Navarro, Alexis Gordon, Sooyeon Lee, and Matt Huenerfauth. 2022. Support in the Moment: Benefits and use of video-span selection and search for sign-language video comprehension among ASL learners. In Proceedings of the 24th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '22). Association for Computing Machinery, New York, NY, USA, Article 29, 1–14. <https://doi.org/10.1145/3517428.3544883>(35/132=26.5% technical papers accepted)

**Conference Award: Best Paper Nominee (top 7% of submissions)**

- [FP.3] **Saad Hassan**, Akhter Al Amin, Alexis Gordon, Sooyeon Lee, and Matt Huenerfauth. 2022. Design and Evaluation of Hybrid Search for American Sign Language to English Dictionaries: Making the Most of Imperfect Sign Recognition. In

Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems (CHI '22). Association for Computing Machinery, New York, NY, USA, Article 195, 1–13. <https://doi.org/10.1145/3491102.3501986> (324/2597=12.25% papers directly accepted)

[FP.2] Akhter Al Amin, **Saad Hassan**, Sooyeon Lee, and Matt Huenerfauth. 2022. Watch It, Don't Imagine It: Creating a Better Caption-Occlusion Metric by Collecting More Ecologically Valid Judgments from DHH Viewers. In Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems (CHI '22). Association for Computing Machinery, New York, NY, USA, Article 459, 1–14. <https://doi.org/10.1145/3491102.3517681>(674/2597=25.9% papers accepted)

[FP.1] Akhter Al Amin, **Saad Hassan**, and Matt Huenerfauth. 2021. Caption-Occlusion Severity Judgments across Live-Television Genres from Deaf and Hard-of-hearing Viewers. In Proceedings of the 18th International Web for All Conference (W4A '21). Association for Computing Machinery, New York, NY, USA, Article 26, 1–12. <https://doi.org/10.1145/3430263.3452429> (20/38=53% papers accepted)

## PEER-REFEREED SHORT PAPERS, PUBLISHED IN CONFERENCE PROCEEDINGS

[SP.8] Lloyd May, Alex Williams, **Saad Hassan**, Mark Cartwright, and Sooyeon Lee. 2024. Towards a Rich Format for Closed-Captioning. In Proceedings of the 26th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '24). Association for Computing Machinery, New York, NY, USA, Article 126, 1–5. <https://doi.org/10.1145/3663548.3688504> (58/87=66.7% poster and demo papers accepted)

[SP.7] LouAnne Boyd, Annuska Zolyomi, **Saad Hassan**, Seray B Ibrahim, Guande Wu, and Kay Kender. 2024. Exploring the "Freedom to be Me" through Design Sprints with Neurodivergent Scholars. In Proceedings of the 26th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '24). Association for Computing Machinery, New York, NY, USA, Article 96, 1–6. <https://doi.org/10.1145/3663548.3688527> (58/87=66.7% poster and demo papers accepted)

[SP.6] Matyas Bohacek and **Saad Hassan**. 2023. Sign Spotter: Design and Initial Evaluation of an Automatic Video-Based American Sign Language Dictionary System. In Proceedings of the 25th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '23). Association for Computing Machinery, New York, NY, USA, Article 92, 1–5. <https://doi.org/10.1145/3597638.3614497>(40/77=51.9% poster and demo papers accepted)

[SP.5] Akhter Al Amin, **Saad Hassan**, Matt Huenerfauth, and Cecilia Ovesdotter Alm. 2023. Modeling Word Importance in Conversational Transcripts: Toward improved live captioning for Deaf and hard of hearing viewers. In Proceedings of the 20th International Web for All Conference (W4A '23). Association for Computing Machinery, New York, NY, USA, 79–83. <https://doi.org/10.1145/3587281.3587290> (16/32=50% papers accepted)

[SP.4] **Saad Hassan**, Yao Ding, Agneya Abhimanyu Kerure, Christi Miller, John Burnett, Emily Biondo, and Brenden Gilbert. 2023. Exploring the Design Space of Automatically Generated Emotive Captions for Deaf or Hard of Hearing Users. In Extended Abstracts of the 2023 CHI Conference on Human Factors in Computing Systems (CHI EA '23). Association for Computing Machinery, New York, NY, USA, Article 125, 1–10. <https://doi.org/10.1145/3544549.3585880> (330/968=34.1% late-breaking works accepted)

[SP.3] **Saad Hassan**, Sooyeon Lee, Dimitris Metaxas, Carol Neidle, and Matt Huenerfauth. 2022. Understanding ASL Learners' Preferences for a Sign Language Recording and Automatic Feedback System to Support Self-Study. In Proceedings of the 24th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '22). Association for Computing Machinery, New York, NY, USA, Article 85, 1–5. <https://doi.org/10.1145/3517428.3550367> (43/73=58.9% poster papers and demos accepted)

[SP.2] **Saad Hassan**. 2022. Designing and Experimentally Evaluating a Video-based American Sign Language Look-up System. In Proceedings of the 2022 Conference on Human Information Interaction and Retrieval (CHIIR '22). Association for Computing Machinery, New York, NY, USA, 383–386. <https://doi.org/10.1145/3498366.3505804>

### Invited to the Doctoral Consortium

[SP.1] **Saad Hassan**, Matt Huenerfauth, Cecilia Ovesdotter Alm. 2021. "Unpacking the Interdependent Systems of Discrimination: Ableist Bias in NLP Systems through an Intersectional Lens." In Findings of the Association for Computational Linguistics: EMNLP 2021, Punta Cana, Dominican Republic, November 2021. Pages 3116–3123. Association for Com-

putational Linguistics. <https://aclanthology.org/2021.findingsemnlp.267> (950/2549=34.9% papers to main conference and findings accepted)

## BOOK CHAPTERS, PEER-REVIEWED PAPERS PUBLISHED AS BOOK CHAPTERS

- [C.2] Akhter Al Amin, **Saad Hassan**, Matt Huenerfauth. 2021. “Effect of Occlusion on Deaf and Hard of Hearing Users’ Perception of Captioned Video Quality.” In: Antona M., Stephanidis C. (eds) Universal Access in Human-Computer Interaction. Access to Media, Learning and Assistive Environments. HCII 2021. Lecture Notes in Computer Science, vol 12769. Springer, Cham. [https://doi.org/10.1007/978-3-030-78095-1\\_16](https://doi.org/10.1007/978-3-030-78095-1_16)
- [C.1] **Saad Hassan**, Aiza Hasib, Suleman Shahid, Sana Asif, and Arsalan Khan. 2019. Kahaniyan - Designing for Acquisition of Urdu as a Second Language. In Human-Computer Interaction – INTERACT 2019: 17th IFIP TC 13 International Conference, Paphos, Cyprus, September 2–6, 2019, Proceedings, Part II. Springer-Verlag, Berlin, Heidelberg, 207–216. [https://doi.org/10.1007/978-3-030-29384-0\\_13](https://doi.org/10.1007/978-3-030-29384-0_13) (55/196=28% short papers accepted)

## PEER-REFEREED PAPERS, PUBLISHED IN WORKSHOP PROCEEDINGS

- [W.3] **Saad Hassan**, Matthew Seita, Larwan Berke, Yingli Tian, Elaine Gale, Sooyeon Lee, and Matt Huenerfauth. 2022. ASL-Homework-RGBD Dataset: An Annotated Dataset of 45 Fluent and Non-fluent Signers Performing American Sign Language Homeworks. In Proceedings of the LREC2022 10th Workshop on the Representation and Processing of Sign Languages: Multilingual Sign Language Resources, pages 67–72, Marseille, France. European Language Resources Association. <https://aclanthology.org/2022.signlang-1.11/>
- [W.2] Akhter Al Amin, **Saad Hassan**, Cecilia Alm, Matt Huenerfauth. 2022. “Using BERT Embeddings to Model Word Importance in Conversational Transcripts for Deaf and Hard of Hearing Users.” The Second Workshop on Language Technology for Equality, Diversity and Inclusion (LT-EDI), at the 60th Annual Meeting of the Association for Computational Linguistics (ACL 2022), Association for Computational Linguistics. Pages 35-40. <https://aclanthology.org/2022.ltedi-1.5> DOI: 10.18653/v1/2022.ltedi-1.5
- [W.1] **Saad Hassan**, Larwan Berke, Elahe Vahdani, Longlong Jing, Yingli Tian, Matt Huenerfauth. 2020. “An Isolated-Signing RGBD Dataset of 100 American Sign Language Signs Produced by Fluent ASL Signers.” In Proceedings of the LREC2020 9th Workshop on the Representation and Processing of Sign Languages: Sign Language Resources in the Service of the Language Community, Technological Challenges and Application Perspectives. European Language Resources Association (ELRA), 89–94. <https://www.aclweb.org/anthology/2020.signlang-1.14>

## OTHER PUBLICATIONS OR POSTERS

- [O.3] **Saad Hassan**, Syeda Mah Noor Asad, Motahhare Eslami, Nicholas Mattei, Aron Culotta, and John Zimmerman. 2024. PACE: Participatory AI for Community Engagement. Proceedings of the AAAI Conference on Human Computation and Crowdsourcing, 12, 1 (Oct. 2024), 151-154. <https://doi.org/10.1609/hcomp.v12i1.31610>.
- [O.2] Allison Benz, Spencer Montan, Byron Behm, Nisha Cerame, Ikemefuna Chukwunyeremwa, Loam Shin, Jinlan Li, Tony Ellis, Thad Starner, **Saad Hassan**, Abraham Glasser, Max Shengelia, Prerna Ravi, Sahir Shahryar, Colby Duke. 2022. PopSign: Mobile games to Teach Sign Language. Imagine RIT 2022. Rochester, NY
- [O.1] **Saad Hassan**, Oliver Alonzo, Abraham Glasser, Matt Huenerfauth. 2020. “Effect of Ranking and Precision of Results on Users’ Satisfaction with Search-by-Video Sign-Language Dictionaries.” Sign Language Recognition, Translation & Production (SLRTP) Workshop, at the 16th European Conference on Computer Vision (ECCV’20). Poster Presentation. (8/12=66.7% extended abstracts accepted)

## Teaching Experience and Curriculum Design

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**Spring 2025:** Introduction to Data Science (CMPS 3160), Tulane University, *Course Instructor*

**Fall 2024:** Human-Computer Interaction (CMPS 4661), Tulane University, *Course Instructor*

Recipient of the Tulane Innovation Institute’s Faculty Innovation Grant

Evaluations: Recommend Instructor (4.83/5), Recommend Course (4.56/5), Fostering Inclusive Space (4.67/5)

**Spring 2024:** Introduction to Data Science (CMPS 3160), Tulane University, *Course Instructor*

Evaluations: Recommend Instructor (4.91/5), Recommend Course (4.79/5), Fostering Inclusive Space (4.74/5)

**Fall 2023:** Human-Computer Interaction (CMPS 4661), Tulane University, *Course Instructor*

Developed Tulane University’s first course on Human-Computer Interaction (HCI). Students are introduced to design principles, key concepts in cognitive psychology, qualitative and quantitative research in HCI, and design and evaluation techniques. Organized three guest lectures on advanced topics in HCI research, including designing for creative

expression, accessibility, and visualization.

Evaluations: Recommend Instructor (4.31/5), Recommend Course (4.0/5), Fostering Inclusive Space (4.85/5)

CELT Guest Lectures Evaluations: Connecting to Classroom Experience (5/5), Connecting to the Course (5/5), Good Addition: (5/5)

**Fall 2022:** Capstone in Human-Computer Interaction (HCIN 700), Rochester Institute of Technology, *Teaching Assistant*

**Fall 2022:** Research Methods in HCI (HCIN 600), Rochester Institute of Technology, *Teaching Assistant*

**Spring 2019:** Software Engineering (CS 360), Lahore University of Management Sciences, *Teaching Assistant*

## Mentoring

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### PHD DISSERTATION ADVISEES (INCOMING SPRING 2024)

Chaelin Kim, Computer Science PhD Student at Tulane University, 2024 - Present.

Syeda Mah Noor Asad, Computer Science PhD Student at Tulane University, 2024 - Present.

Nazmun Nahar Khanom, Computer Science PhD Student at Tulane University, 2024 - Present.

### DISSERTATION COMMITTEES

Fraol Batole, Computer Science Ph.D. Student at Tulane University, Dissertation committee member since December 2024.

Linsen Li, Computer Science Ph.D. Student at Tulane University, Thesis prospectus defended on November 20, 2024.

### MASTERS STUDENT RESEARCH ADVISEES

Will Silver Wagman, Computer Science M.S. Student, Psychology B.S. at Tulane University, 2023 to Present.

Recipient of CELT Undergraduate Sponsored Research Grant. Co-author, e.g. of of ACM SIGCHI Conference on Human Factors in Computing Systems (CHI 2024). Best Paper Honorable Mention Awardee at CHI'24.

Mathew Watkins, Human-Computer Interaction M.S. Student at RIT, 2021 to 2022.

Kira Hart, Secondary Education of DHH Students M.S. Student at RIT, 2021 to 2022.

Abhay Dixit, Computer Science M.S. Student at RIT, 2021 to 2022.

Sunnihi Manduva, Human-Computer Interaction M.S. Student at RIT, 2020 to 2021.

Ruiwen Fan, Human-Computer Interaction M.S. Student at RIT, 2019 to 2020.

### UNDERGRADUATE STUDENT RESEARCH ADVISEES

Aaron Gershkovich, Biomedical Engineering & Computer Science B.S. Student at Tulane University, 2024 to Present.

Recipient of the Honorable Mention for the 2024-2025 Outstanding Undergraduate Researcher Award (URA). Recipient of CELT Undergraduate Sponsored Research Grant. "Best Prototype" award winner at the 2024 Annual Undergraduate Poster Session at Tulane University

Michael M. Weild, Finance & Computer Science B.S. Student at Tulane University, 2024 to Present.

Oscar Xiao, Finance & Computer Science B.S. Student at Tulane University, 2024 to Present.

Recipient of CELT Undergraduate Sponsored Research Grant.

Madeline "Dylan" Murray, Biology & Computer Science B.S. Student at Tulane University, 2024 to Present.

Recipient of CELT Undergraduate Sponsored Research Grant.

Nikhil Modayur, Finance & Computer Science B.S. Student at Tulane University, 2024 to Present.

Caitlin Chen, Neuroscience & Computer Science B.S. Student at Tulane University, 2023 to Present.

Recipient of CELT Undergraduate Sponsored Research Grant.

Matyáš Boháček, Computer Science B.S. Student at Stanford University, 2021 to Present.

Co-author, e.g. of ACM SIGACCESS Conference on Computing Accessibility paper (ASSETS 2023)

Toni D'aurio, ASL-English Interpreting B.S. Student at RIT, 2023 to Present.

Max Shengelia, Web and Mobile Computing B.S. Student at RIT, 2021 to 2023.

Co-author, e.g. of ACM Conference on Mobile Human-Computer Interaction (MHCI 2023)

Nathan Tinker, ASL-English Interpreting B.S. Student at RIT, 2022 to 2023.

Briana Davis, ASL-English Interpreting B.S. Student at RIT, 2021 to 2023.

Co-author, e.g. of ACM SIGCHI Conference on Human Factors in Computing Systems (CHI 2024)

Diego Navarro, ASL-English Interpreting B.S. Student at RIT, 2021 to 2022.

Co-author, e.g. of ACM SIGACCESS Conference on Computing Accessibility paper (ASSETS 2022)

Alexis Gordon, Human-Centered Computing B.S. Student at RIT, 2020 to 2022.

Co-author, e.g. of ACM SIGCHI Conference on Human Factors in Computing Systems (CHI 2022)

Megan Gross, ASL-English Interpreting B.S. Student at RIT, 2021 to 2022.

Velvet Howland, ASL-English Interpreting B.S. Student at RIT, 2021 to 2022.

Cole Inniss, Human-Centered Computing B.S. Student at RIT, 2020 to 2021.

Taylor Harris, ASL-English Interpreting B.S. Student at RIT, 2021 to 2022.

Jake Schwall, New Media Marketing B.S. Student at RIT, 2021 to 2022.

Sarah Morgenthal, ASL-English Interpreting B.S. Student at RIT, 2020-2022.

Konce Quispe, Computer Science B.S. Student at RIT, 2019 to 2020.

Ben Leyer, ASL-English Interpreting B.S. Student at RIT, 2019 to 2022.

#### UNDERGRADUATE HONOR THESIS ADVISEES

Sydney Wade, Neuroscience & Computer Science B.S. Student at Tulane University, 2024 to Present.

#### UNDERGRADUATE CAPSTONE PROJECT ADVISEES (MOST CAPSTONE PROJECTS WERE RESEARCH ORIENTED)

Madhangi Krishnan, Neuroscience & Computer Science B.S. Student at Tulane University, 2024 to Present.

Cameron McLaren, Psychology & Computer Science B.S. Student at Tulane University, 2024 to Present.

Sam DeMarinis, Math & Computer Science B.S. Student at Tulane University, 2024 to Present.

Miranda Diaz, Neuroscience & Computer Science B.S. Student at Tulane University, 2024 to Present.

Zoe S. Oboler, Design & Computer Science B.S. Student at Tulane University, 2024 to Present.

Basil Mustafa, Information Technology & Computer Science B.S. Student at Tulane University, 2024 to Present.

Hubert Mendez, Biomedical Engineering & Computer Science B.S. Student at Tulane University, 2024 to Present.

Ethan Schaferkotter, Psychology & Computer Science B.S. Student at Tulane University, 2024 to Present.

Izzy Blair, Music Performance & Computer Science B.S. Student at Tulane University, 2024 to Present.

Justin Haysbert, Psychology & Computer Science B.S. Student at Tulane University, 2023 to 2024.

Ryan Stevens, Management & Computer Science B.S. Student at Tulane University, 2023 to 2024.

Shayne Shelton, Biomedical Engineering & Computer Science B.S. Student at Tulane University, 2023 to 2024.

Gabriel Sagrera, Biomedical Engineering & Computer Science B.S. Student at Tulane University, 2023 to 2024.

Devin Gutierrez, Design & Computer Science B.S. Student at Tulane University, 2023 to 2024.

Tanner Martz, Design & Computer Science B.S. Student at Tulane University, 2023 to 2024.

#### TEACHING AND CLASS ASSISTANTS

Cameron McLaren, Classical Studies & Computer Science B.S. Student at Tulane University, 2023 to present.

Amin Mir Fakhar, Computer Science Ph.D. Student at Tulane University, Spring 2025.

Lorraine Steigner, Classical Studies & Computer Science B.A. Student at Tulane University, Spring 2024 & Fall 2024.

Cameron McLaren, Classical Studies & Computer Science B.S. Student at Tulane University, Fall 2024.

Yunbei Zhang, Computer Science Ph.D. Student at Tulane University, Spring 2024.

## Service Activities

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### WITHIN THE UNIVERSITY

**CS Social Chair**, Organizing social events for the CS department, Tulane University, (2024 - Present)

**SSE Curriculum Committee**, Member and Computer Science Representative of the Curriculum Committee for School of Science and Engineering, Tulane University, (2023 - Present)

**CS Curriculum Committee**, Member of the Undergraduate Curriculum Committee for Department of Computer Science, Tulane University (2023 - 2024)

**CS Undergraduate Studies Committee**, Member of the Undergraduate Studies Committee for Department of Computer Science, Tulane University (2023 - Present)

### CONFERENCE LEADERSHIP ROLES

**Best Paper Award Committee Member**, 2025 CHI Conference on Human Factors in Computing Systems, Yokohama, Japan.

**Best Paper Award Committee Member**, 2024 CHI Conference on Human Factors in Computing Systems, Honolulu, Hawai'i.

**Workshops Chair**, The 26th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2024), St. Johns Canada.

**Proceedings Chair**, The 25th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2023), New York, NY.

### CONFERENCE PROGRAM COMMITTEE ROLES

**Associate Chair**, "Accessibility and Aging" Subcommittee, 2025 CHI Conference on Human Factors in Computing Systems, Yokohama, Japan.

**Program Committee Member**, The 26th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2024), St. Johns, Canada.

**Associate Chair**, "Understanding People — Qualitative Methods" Subcommittee, 2024 CHI Conference on Human Factors in Computing Systems, Honolulu, Hawai'i.

**Area Chair**, "Human-Centered NLP" Subcommittee, 2023 Conference on Empirical Methods in Natural Language Processing, Singapore.

**Program Committee Member**, The 25th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2023), New York, NY.

**Associate Chair**, Late-Breaking Work Track, 2023 CHI Conference on Human Factors in Computing Systems, Hamburg, Germany.

**Program Committee Member**, The 24th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2022), Athens, Greece.

### GRANT REVIEW PANELS

**Proposal Reviewer and Panelist**, National Science Foundation (NSF) Directorate for Computer and Information Science, Division of Information and Intelligent Systems (IIS). 2024-2025.

**Proposal Reviewer and Panelist**, America's Seed Fund – National Science Foundation (NSF) SBIR/STTR. 2024.

### REVIEWING

**Reviewer**, 2024 Conference on Neural Information Processing Systems, Vancouver, British Columbia, Canada

**Ethics Reviewer**, ACL Rolling Review and 2024 Annual Conference of the North American Chapter of the Association for Computational Linguistics Mexico City, Mexico. Since 2024.

**Journal Reviewer**, ACM Transactions on Accessible Computing (TACCESS). Since 2022.

**Journal Reviewer**, Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT). Since 2024

**Reviewer**, ACM Conference on Intelligent User Interfaces (IUI 2025), Cagliari, Italy



**Reviewer**, ACM Conference on Intelligent User Interfaces (IUI 2024), Greenville, South Carolina, USA

**Reviewer**, 2024 CHI Conference on Human Factors in Computing Systems (CHI 2024), Honolulu, Hawai'i.

**Reviewer**, 2023 Conference on Empirical Methods in Natural Language Processing (EMNLP 2023), Singapore.

**Reviewer**, The 28th Annual Meeting of the Intelligent User Interfaces (IUI 2023), Sydney, Australia.

**Reviewer**, The 17th International AAAI Conference on Web and Social Media (ICWSM 2023) (ICWSM 2023), Limassol, Cyprus

**Reviewer**, The 25th International ACM Conference on Computers and Accessibility (ASSETS 2023), New York, NY.

**Reviewer**, The 30th IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR 2023), Shanghai, China

**Reviewer**, 2023 CHI Conference on Human Factors in Computing Systems (CHI 2023), Hamburg, Germany.  
*Special Recognition for Outstanding Reviews*

**Reviewer**, The 24th International ACM Conference on Computers and Accessibility (ASSETS 2023), Athens, Greece.

**Reviewer**, 2022 ACM International Symposium on Wearable Computers (ISWC 2022), Atlanta, USA

**Reviewer**, 2022 CHI Conference on Human Factors in Computing Systems (CHI 2022), New Orleans, LA.  
*Special Recognition for Outstanding Reviews*

**Reviewer**, 2022 ACM Interaction Design and Children Conference (IDC 2022), Braga, Portugal

**Reviewer**, 2022 ACM Symposium of Eye Tracking Research & Applications (ETRA 2022), Seattle, WA

**Reviewer**, 2022 Nordic Conference on Human-Computer Interaction (NordiCHI 2022), Aarhus, Denmark

**Reviewer**, The 17th ACM IEEE International Conference on Human Robot Interaction (HRI 2022), Hokkaido, Japan (Virtual)

**Reviewer**, 2022 Annual Symposium on Computer-Human Interaction in Play (CHI PLAY 2022), Bremen, Germany

**Reviewer**, 2021 Australian Conference on Human-Computer Interaction (OzCHI 2021), Virtual

## OTHER ACTIVITIES

**Participant**, TeachAccess Program, Remote, (2021)

**Communication Chair**, Center for Accessibility and Inclusion Research, Rochester Institute of Technology (2020 - 2022)

## Invited Presentations and Guest Lectures

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### GUEST LECTURES IN UNIVERSITY COURSES

November 2023. *Human-Computer Interaction and Accessibility Research*. Research Seminar (CMPS 7010), Tulane University

November 2023. *Human-Computer Interaction and Accessibility Research*. Introduction to Computer Science (CMPS 1500), Tulane University

April 2021. *Ubiquitous Computing for People with Disabilities*. Human-Computer Interaction with Mobile, Wearable, and Ubiquitous Device (HCIN 722), Rochester Institute of Technology

### INVITED TALKS AND PANELS

April 2024. *AI and Equity (Panel)*. Tulane University, New Orleans, LA

November 2023. *AI-powered Linguistic Technologies for Deaf and Hard of Hearing Individuals (Panel)*. NOLA AI Conference, New Orleans, LA

November 2023. *AI-powered Sign Language Learning Tools*. Duolingo Research, Pittsburg, PA.

March 2023. *Designing AI-Based Applications to Benefit Deaf and Hard-of-Hearing Individuals and Sign-Language Users: An HCI Perspective*. Tulane University, New Orleans, LA.

February 2023. *Designing AI-Based Applications to Benefit Deaf and Hard-of-Hearing Individuals and Sign-Language Users: An HCI Perspective*. University of Amsterdam, Remote.

February 2023. *Designing AI-Based Applications to Benefit Deaf and Hard-of-Hearing Individuals and Sign-Language Users: An HCI Perspective*. Pennsylvania State University, State College, PA.

February 2023. *Designing AI-Based Applications to Benefit Deaf and Hard-of-Hearing Individuals and Sign-Language Users*. The University of Alabama, Tuscaloosa, AL.

February 2023. *Designing and Experimentally Evaluating Applications of AI-based Technologies to Support Deaf and Hard of Hearing Individuals and Sign Language Users*. California Polytechnic State University, San Luis Obispo County, CA.

November 2022. *Language and Speech-based Assistive Technologies for DHH Individuals*. Johns Hopkins University, Remote

August 2022. *Designing Captions for Deaf and Hard of Hearing Individuals*. Meta Reality Labs, Redmond, WA

April 2022. *Sign Language based Smartphone Interactions*. Google People and AI Research (PAIR) Group, Remote

July 2021. *AI-based Technologies for Deaf and Hard of Hearing Individuals*. Research Experience for Undergraduates (REU) Research Symposium, Remote

## Media Outreach

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Featured in a October 5, 2022 RIT News article entitled “Saad Hassan: Researching at the intersection of computing and accessibility”, [www.rit.edu/news/researching-intersection-computing-and-accessibility](http://www.rit.edu/news/researching-intersection-computing-and-accessibility)

Featured in the Duolingo Blog in a September 16, 2022 article entitled “Our 2022 Duolingo Research Grant Winners!”, [blog.duolingo.com/2022-duolingo-research-grant](https://blog.duolingo.com/2022-duolingo-research-grant)

## Professional Memberships

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**Association for Computing Machinery (ACM):** Special Interest Group on Accessible Computing (SIGACCESS), Special Interest Group on Human-Computer Interaction (SIGCHI), Special Interest Group on Information Retrieval SIGIR