Abraham Glasser, Ph.D.

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Academic Appointments

Gallaudet University Washington, D.C.
School of Science, Technology, Mathematics, and Public Health (STAMP)
Assistant Professor, Accessible Human-Centered Computing . . . . August 2023 - **Present**

Education

Ph.D., Computing and Information Sciences **2019 - 2022**
Rochester Institute of Technology (RIT) Rochester, NY, USA
Dissertation: *Empirical Investigations and Dataset Collection for American Sign Language-Aware Personal Assistants*
Advisor: Dr. Matt Huenerfauth
Committee: Drs. Kristen Shinohara, Roshan Peiris, and Danielle Bragg

B.S., Computer Science **2015 - 2018**
Rochester Institute of Technology (RIT) Rochester, NY, USA
❖ *Minor in Mathematics*
❖ *NTID Outstanding Graduate Award [top 1% of students]*

External Research Funding

Abraham Glasser (PI). June 2024 to May 2026. "CRII: HCC: American Sign Language-enabled Digital Assistants: Models and Metrics for User Satisfaction". National Science Foundation. Award total: **$174,999**.

Christian Vogler (Co-PI), **Abraham Glasser (Co-PI)**. September 2024 to September 2029. "Rehabilitation Engineering Research Center on Technology for the Deaf and Hard of Hearing". National Institute on Disability, Independent Living, and Rehabilitation Research. Award total: **$4,624,995**.

University-Internal Research Funding

Kenneth DeHaan (Co-PI), **Abraham Glasser (Co-PI)**. December 2024 to September 2025. "Smart DeafSpace: Innovative and Interactive Technological Sensoryscapes". President Research Excellence Award Program. Award total: **$40,151.91**.

Work Experience History

Research Associate
Gallaudet University Technology Access Program (TAP) . . . . . January - June 2023
- Supervisor: Dr. Christian Vogler
- Lead role in designing, conducting, analyzing and writing up experiments for two different grant-funded projects
- Working with a group of students and staff, supervising research experiments for adherence to best scientific practices
- Assisting the principal investigators in planning, carrying out the research experiment timeline, as well as reporting and dissemination

Adjunct Professor I
Gallaudet University . . . . . January - May 2023
- Taught one graduate-level course: AHC-606, "Accessibility Standards II" course (see Teaching Experience section for details) for the Gallaudet M.S. in Accessible Human-Centered Computing (AHCC) program

Researcher
RIT Center for Accessibility and Inclusion Research (CAIR) January 2019 - May 2023
- Supervisor: Dr. Matt Huenerfauth
- Conduct computing and human-computer interaction work
- Manage undergraduate and graduate researchers working on research project logistics
- http://cair.rit.edu/, http://latlab.ist.rit.edu/

Student Researcher
Google Research, Mountain View, CA, USA *(virtual)* . . . . . January - August 2022
- Supervisor: Dr. Thad Starner
- Worked with the Perception team, gave project presentations, attended weekly check-in meetings with vendor
- Used prior PhD dissertation work to influence research strategies for a current project
- Designed, conducted, analyzed, and disseminated usability studies
- Significantly influenced product architectures, bringing key knowledge and ideas

Research Intern
Microsoft Research New England, Cambridge, MA, USA *(virtual)* . May - August 2020
- Worked with Dr. Danielle Bragg
- Designed and conducted an user study related to crowd-sourced ASL data collection, and set up a second user study to extend the original project, published and presented these research projects
- Sketched designs in PowerPoint and used npm, node.js, typescript, docker, mongodb to set up a website for data collection as part of the user study

NSF REU Graduate Assistant
Gallaudet University, Washington D.C., USA . . . . . May - August 2019
- NSF Grant #1757836, Research Experience for Undergraduates (REU), 10-week summer program: *Accessible Information and Communications Technology*

- Mentored 14 undergraduate students throughout their summer research experience, helped publish some works
- Supervisors: Drs. Raja Kushalnagar and Christian Vogler

Software Development Engineer Intern
Microsoft, Redmond, WA, USA . . . . . June - August 2018
- Supervisor: Anatoly Grabar
- Significantly improved user experience by re-implementing UI and simplifying user workflow for an Excel data analysis feature.
- Used C++, C#, XML. Collaborated with partner teams while doing this work.

Undergraduate Research Assistant
RIT Linguistic and Assistive Technologies Laboratory (LATLAB) January - December 2018
- Assisted graduate students in research relating to accessible technology for Deaf and Hard-of-Hearing individuals, with a focus on automatic speech recognition.

Software Developer & Research Engineer
RIT/NTID Center on Access Technology (CAT) . . . . . August 2017 - December 2018
- Developed, tested, and documented various software applications that use automatic speech recognition (ASR).
- Helped set up and troubleshoot ASR technology in classrooms. Checked accuracy of speech to text transcripts, and conducted usability studies. Used Microsoft APIs, bash, and various software packages for analysis of data.
- Work was showcased in Microsoft blog: https://blogs.microsoft.com/ai/ai-powered-captioning/

Computer Science Tutor
RIT/NTID Information and Computing Studies . . . . . August 2016 - December 2018
- Tutored students to help them go through their work and review or learn new concepts, including syntax and logic of code, object-oriented programming, GUIs, and debugging of code.

Math & Physics Tutor
RIT/NTID Science and Mathematics . . . . . January 2016 - December 2018
- Tutored a wide range of mathematics, from pre-algebra to calculus, advanced mathematics, and physics.

Math Undergraduate Research Assistant
RIT/NTID Office of the Associate Dean of Research . . . . . August - December 2017
- Assisted Professor Bonnie Jacob in performing original mathematics research related to zero forcing and domination in graph theory. Used computer science knowledge to prove NP-hardness and complexity of several algorithms.
- Helped collect results and write a math paper to be submitted to a journal and conferences.
- Poster presentation featured by NTID Research Fair: http://www.rit.edu/news/story.php?id=66594

Undergraduate Research Assistant
NSF REU SITE: Accessible Multimodal Interfaces . . . . . May - August 2017
- NSF Award #1460894

- Performed research on American Sign Language recognition using Microsoft Kinect™. Used machine learning, image recognition tools, Python and C# code. Presented at an undergraduate symposium.

Intern (Software Development and Testing)
NASA Kennedy Space Center, FL, USA . . . . . January - May 2017
- Wrote/fixed/executed unit tests, and analyzed and enhanced automated testing frameworks.
- Reported to multiple technical and management personnel, participated in regular 'sprint' meetings.

Research and Development (R&D)
RIT/NTID Center on Access Technology (CAT) . . . . . September - December 2016
- Helped test various automatic speech recognition software. Used APIs, bash, and various programming languages.

Undergraduate Research Assistant
NSF REU SITE: Accessible Multimodal Interfaces . . . . . May - August 2016
- NSF Award #1460894
- Performed research on output and accuracy of various automatic speech recognition engines.
- Used Unix (bash), Python, and C code. Gave a poster presentation at an undergraduate symposium.

Refereed Journal Articles

[J.4] Kelly Mack, Maitraye Das, Dhruv Jain, Danielle Bragg, John Tang, Andrew Begel, Erin Beneteau, Josh Urban Davis, Abraham Glasser, Joon Sung Park, and Venkatesh Potluri. "Mixed abilities and varied experiences: a group autoethnography of a virtual summer internship". *Commun. ACM*, 66(8):105–113, Aug. 2023. ISSN: 0001-0782. DOI: 10.1145/3604622. URL: https://doi.org/10.1145/3604622.

[J.3] Danielle Bragg, **Abraham Glasser**, Fyodor Minakov, Naomi Caselli, and William Thies. "Exploring collection of sign language videos through crowdsourcing". *Proceedings of the ACM on Human-Computer Interaction*, 6(CSCW2), Nov. 2022. DOI: 10.1145/3555627.

[J.2] Saad Hassan, Oliver Alonzo, **Abraham Glasser**, and Matt Huenerfauth. "Effect of sign-recognition performance on the usability of sign-language dictionary search". *ACM Transactions on Accessible Computing*, 14(4), Oct. 2021. ISSN: 1936-7228. DOI: 10.1145/3470650.

[J.1] **Abraham Glasser**, Bonnie Jacob, Emily Lederman, and Stanisław Radziszowski. "Failed power domination on graphs". *The Australasian Journal of Combinatorics*, Feb. 2020. URL: https://ajc.maths.uq.edu.au/pdf/76/ajc_v76_p232.pdf.

Book Chapters

[B.1] Akhter Al Amin, **Abraham Glasser**, Raja Kushalnagar, Christian Vogler, and Matt Huenerfauth. “Preferences of deaf or hard of hearing users for live-tv caption appearance”. In Margherita Antona and Constantine Stephanidis, editors, *Universal Access in Human-Computer Interaction. Access to Media, Learning and Assistive Environments*, pages 189–201, Cham. Springer International Publishing, 2021. ISBN: 978-3-030-78095-1. DOI: 10.1007/978-3-030-78095-1_15.

Peer-Refereed Conference Papers

[C.30] Mariana Arroyo Chavez, Bernard Thompson, Molly Feanny, Kafayat Alabi, Minchan Kim, Lu Ming, **Abraham Glasser**, Raja Kushalnagar, and Christian Vogler. “Customization of closed captions via large language models”. In *Computers Helping People with Special Needs: 19th International Conference, ICCHP 2024, Linz, Austria, July 8–12, 2024, Proceedings, Part II*, pages 50–58, Linz, Austria. Springer-Verlag, 2024. DOI: 10.1007/978-3-031-62849-8_7.

[C.29] Paige S Devries, Nina Tran, Keith Delk, Melanie Miga, Richard Carlisle Taulbee, Pranav Pidathala, **Abraham Glasser**, Raja Kushalnagar, and Christian Vogler. “Sign language-based versus touch-based input for deaf users with interactive personal assistants in simulated kitchen environments”. In *Extended Abstracts of the CHI Conference on Human Factors in Computing Systems*, CHI EA ’24, Honolulu, HI, USA. Association for Computing Machinery, 2024. DOI: 10.1145/3613905.3651075.

[C.28] Nina Tran, Paige S DeVries, Matthew Seita, Raja Kushalnagar, **Abraham Glasser**, and Christian Vogler. “Assessment of sign language-based versus touch-based input for deaf users interacting with intelligent personal assistants”. In *Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems*, CHI ’24, Honolulu, HI, USA. Association for Computing Machinery, 2024. DOI: 10.1145/3613904.3642094.

[C.27] Mariana Arroyo Chavez, Molly Feanny, Matthew Seita, Bernard Thompson, Keith Delk, Skyler Officer, **Abraham Glasser**, Raja Kushalnagar, and Christian Vogler. “How users experience closed captions on live television: quality metrics remain a challenge”. In *Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems*, CHI ’24, Honolulu, HI, USA. Association for Computing Machinery, 2024. DOI: 10.1145/3613904.3641988.

[C.26] Saad Hassan, **Abraham Glasser**, Max Shengelia, Thad Starner, Sean Forbes, Nathan Qualls, and Sam S. Sepah. “Tap to sign: towards using american sign language for text entry on smartphones”. *Proc. ACM Hum.-Comput. Interact.*, 7(MHCI), Sept. 2023. DOI: 10.1145/3604274. URL: https://doi.org/10.1145/3604274.

[C.25] Danielle Bragg, **Abraham Glasser**, Fyodor Minakov, Naomi Caselli, and William Thies. “Exploring collection of sign language videos through crowdsourcing”. *Proc. ACM Hum.-Comput. Interact.*, 6(CSCW2), Nov. 2022. DOI: 10.1145/3555627.

[C.24] **Abraham Glasser**, Fyodor Minakov, and Danielle Bragg. “ASL Wiki: An Exploratory Interface for Crowdsourcing ASL Translations”. In *The 24th International ACM SIGACCESS Conference on Computers and Accessibility*, ASSETS ’22, Athens, Greece. Association for Computing Machinery, 2022. DOI: 10.1145/3517428.3544827.

[C.23] **Abraham Glasser**, Matthew Watkins, Kira Hart, Sooyeon Lee, and Matt Huenerfauth. "Analyzing Deaf and Hard-of-Hearing Users' Behavior, Usage, and Interaction with a Personal Assistant Device that Understands Sign-Language Input". In *In Proceedings of the CHI Conference on Human Factors in Computing Systems Proceedings*, CHI '22, New Orleans, LA, USA. Association for Computing Machinery, 2022. DOI: 10.1145/3491102.3501987. [26% paper acceptance rate].

[C.22] Kelly Mack, Maitraye Das, Dhruv Jain, Danielle Bragg, John Tang, Andrew Begel, Erin Beneteau, Josh Urban Davis, **Abraham Glasser**, Joon Sung Park, and Venkatesh Potluri. "Mixed abilities and varied experiences: a group autoethnography of a virtual summer internship". In *The 23rd International ACM SIGACCESS Conference on Computers and Accessibility*, ASSETS '21, Virtual Event, USA. Association for Computing Machinery, 2021. DOI: 10.1145/3441852.3471199. [29% paper acceptance rate] **[ASSETS'21 Best Paper Nominee (Top 7%)]**.

[C.21] Sooyeon Lee, **Abraham Glasser**, Becca Dingman, Zhaoyang Xia, Dimitris Metaxas, Carol Neidle, and Matt Huenerfauth. "American sign language video anonymization to support online participation of deaf and hard of hearing users". In *The 23rd International ACM SIGACCESS Conference on Computers and Accessibility*, ASSETS '21, Virtual Event, USA. Association for Computing Machinery, 2021. DOI: 10.1145/3441852.3471200. [29% paper acceptance rate] **[ASSETS'21 Best Paper Nominee (Top 7%)]**.

[C.20] **Abraham Glasser**, Joseline Garcia, Chang Hwang, Christian Vogler, and Raja Kushalnagar. "Effect of Caption Width on the TV User Experience by Deaf and Hard of Hearing Viewers". In *Proceedings of the 18th Web for All Conference*, W4A '21, Ljubljana, Slovenia. Association for Computing Machinery, 2021. DOI: 10.1145/3430263.3452435. [53% paper acceptance rate].

[C.19] **Abraham Glasser**, Vaishnavi Mande, and Matt Huenerfauth. "Understanding Deaf and Hard-of-Hearing Users' Interest in Sign-Language Interaction with Personal-Assistant Devices". In *Proceedings of the 18th Web for All Conference*, W4A '21, Ljubljana, Slovenia. Association for Computing Machinery, 2021. DOI: 10.1145/3430263.3452428. [53% paper acceptance rate].

[C.18] Vaishnavi Mande, **Abraham Glasser**, Becca Dingman, and Matt Huenerfauth. "Deaf Users' Preferences Among Wake-Up Approaches during Sign-Language Interaction with Personal Assistant Devices". In *Extended Abstracts of the 2021 CHI Conference on Human Factors in Computing Systems*, CHI '21, Yokohama, Japan. Association for Computing Machinery, 2021. DOI: 10.1145/3411763.3451592. [27% paper acceptance rate].

[C.17] **Abraham Glasser**, Vaishnavi Mande, and Matt Huenerfauth. "On How Deaf and Hard of Hearing Users Might Use Sign Language Conversational User Interfaces". In *Proceedings of the Sign Language Recognition, Translation & Production (SLRTP) Workshop*, SLRTP '20, 2020. URL: https://slrtp.com/. Video: https://www.youtube.com/watch?v=N5OAUAYWX_M.

[C.16] Saad Hassan, Oliver Alonzo, **Abraham Glasser**, and Matt Huenerfauth. "Effect of Ranking and Precision of Results on Users' Satisfaction with Search-by-Video Sign-Language Dictionaries." In *Proceedings of the Sign Language Recognition, Translation & Production (SLRTP) Workshop*, SLRTP '20, 2020. URL: https://slrtp.com/.

[C.15] **Abraham Glasser**, Vaishnavi Mande, and Matt Huenerfauth. "Accessibility for Deaf and Hard of Hearing Users: Sign Language Conversational User Interfaces". In *Proceedings of the 2nd Conference on Conversational User Interfaces*, CUI '20, Bilbao, Spain. Association for Computing Machinery, 2020. DOI: 10.1145/3405755.3406158. [33.3% paper acceptance rate].

[C.14] Oliver Alonzo, Matthew Seita, **Abraham Glasser**, and Matt Huenerfauth. "Automatic Text Simplification Tools for Deaf and Hard of Hearing Adults: Benefits of Lexical Simplification and Providing Users with Autonomy". In *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems*, CHI '20, pages 1–13, Honolulu, HI, USA. Association for Computing Machinery, 2020. DOI: 10.1145/3313831.3376563. [24% paper acceptance rate].

[C.13] **Abraham Glasser**, Edward Mason Riley, Kaitlyn Weeks, and Raja Kushalnagar. "Mixed Reality Speaker Identification As an Accessibility Tool for Deaf and Hard of Hearing Users". In *25th ACM Symposium on Virtual Reality Software and Technology*, VRST '19, Parramatta, NSW, Australia, 2019. DOI: 10.1145/3359996.3364720. [14% paper acceptance rate] **[Best Poster Award]**.

[C.12] Spandana Jaggumantri, Sedeeq Al-khazraji, **Abraham Glasser**, and Matt Huenerfauth. "Designing an Interface to Support the Creation of Animations of Individual ASL Signs". In *The 6th International Workshop on Sign Language Translation and Avatar Technologies (SLTAT)*, Hamburg, Germany, Sept. 2019.

[C.11] Oliver Alonzo*, **Abraham Glasser***, and Matt Huenerfauth. "Effect of Automatic Sign Recognition Performance on the Usability of Video-Based Search Interfaces for Sign Language Dictionaries". In *Proceedings of the 21st International ACM SIGACCESS Conference on Computers and Accessibility*, ASSETS '19, Pittsburgh, PA, USA. ACM, Oct. 2019. DOI: 10.1145/3308561.3353791. [24% paper acceptance rate] *[*contributed equally to this work]*.

[C.10] Sushant Kafle, **Abraham Glasser**, Sedeeq Al-khazraji, Larwan Berke, Matthew Seita, and Matt Huenerfauth. "Artificial Intelligence Fairness in the Context of Accessibility Research on Intelligent Systems for People who are Deaf or Hard of Hearing". In *Workshop on AI Fairness for People with Disabilities, Proceedings of the 21st International ACM SIGACCESS Conference on Computers and Accessibility*, ASSETS '19, Pittsburgh, PA, USA. ACM, Oct. 2019. DOI: 10.1145/3386296.3386300. URL: http://www.sigaccess.org/newsletter/2019-10/frontmatter.html.

[C.9] **Abraham Glasser**. "Automatic Speech Recognition Services: Deaf and Hard-of-Hearing Usability". In *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems. CHI 2019*. Glasgow, UK, 2019. DOI: 10.1145/3290607.3308461. **[First Place - Student Research Competition]**.

[C.8] Raja S. Kushalnagar, Gary W. Behm, and **et al.** "RTTD-ID: Tracked Captions with Multiple Speakers for Deaf Students". In *Proceedings of the 2018 ASEE Annual Conference & Exposition. ASEE 2018*, Computing Technology Applications - I, Salt Lake City, Utah, USA. ASEE, 2018. URL: https://peer.asee.org/30945.

[C.7] Raja S. Kushalnagar, Gary W. Behm, **Abraham Glasser**, and Becca A. Dingman. "A Transition Community for Deaf and Hard of Hearing Students in Engineering Programs". In *Proceedings of the 2018 ASEE Annual Conference & Exposition. ASEE 2018*, Creating Equity Through Structure and Pedagogy, Salt Lake City, Utah, USA. ASEE, 2018. URL: https://peer.asee.org/29742.

[C.6] **Abraham Glasser**, Kesavan R. Kushalnagar, and Raja S. Kushalnagar. “Feasibility of Using Automatic Speech Recognition with Voices of Deaf and Hard-of-Hearing Individuals”. In *Proceedings of the 19th International ACM SIGACCESS Conference on Computers and Accessibility. ASSETS ’17*, Baltimore, MD, USA, 2017. DOI: 10.1145/3132525.3134819. [24% paper acceptance rate].

[C.5] **Abraham Glasser**, Kesavan R. Kushalnagar, and Raja S. Kushalnagar. “Deaf, Hard of Hearing, and Hearing Perspectives on Using Automatic Speech Recognition in Conversation”. In Baltimore, MD, USA, 2017. DOI: 10.1145/3132525.3134781. [24% paper acceptance rate].

[C.4] Raja Kushalnagar, Matthew Seita, and **Abraham Glasser**. “Closed asl interpreting for online videos”. In *Proceedings of the 14th International Web for All Conference*, W4A ’17, Perth, Western Australia, Australia. Association for Computing Machinery, 2017. DOI: 10.1145/3058555.3058578. [67% paper acceptance rate].

[C.3] **Abraham Glasser** and Raja S. Kushalnagar. “Automatic Speech Recognition and Readability”. In *Proceedings of the 32nd CSUN Assistive Technology Conference*, San Diego, California, USA, 2017.

[C.2] Kayla P. Vodacek, Raja S. Kushalnagar, and **Abraham Glasser**. “Comparing Automatic Speech Recognition Word Error Rates for Speech & Signs.” In *Proceedings of the 32nd CSUN Assistive Technology Conference*, San Diego, California, USA, 2017.

[C.1] Abigail Spring, Raja S. Kushalnagar, and **Abraham Glasser**. “Usability Testing of Mobile ASR Applications”. In *Proceedings of the 32nd CSUN Assistive Technology Conference*, San Diego, California, USA, 2017.

Posters

[P.17] **Abraham Glasser** and Danielle Bragg. “Crowdsourcing ASL Translations of Wikipedia: Scaling a Parallel Corpus while building a Community Resource ”. In *TISLR 2022*, Osaka, Japan, Nov. 2022.

[P.16] **Abraham Glasser**, Vaishnavi Mande, and Matt Huenerfauth. “Dataset of American Sign Language Personal-Assistant Interactions for Model Training”. In *HCIC 2021*, Nov. 2021.

[P.15] **Abraham Glasser**, Vaishnavi Mande, and Matt Huenerfauth. “Dataset of American Sign Language Personal-Assistant Interactions for Model Training”. In *RIT Graduate Showcase*, Rochester, NY, USA, Nov. 2019.

[P.14] **Abraham Glasser**, Vaishnavi Mande, and Matt Huenerfauth. “Dataset of American Sign Language Personal-Assistant Interactions for Model Training”. In *Microsoft AI For Accessibility Summit*, Seattle, WA, USA, Oct. 2019.

[P.13] Oliver Alonzo, **Abraham Glasser**, Peter Yeung, and Matt Huenerfauth. “Adapting Reading-Assistance and Automatic Text-Simplification Tools to Assist Self-Directed Learning by Deaf and Hard-of-Hearing Computing Workers”. In *National Science Foundation CyberLearning 2019 Conference*, Washington DC, USA, Oct. 2019.

[P.12] **Abraham Glasser**. “Automatic Speech Recognition Services: Deaf and Hard-of-Hearing Usability”. In *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems. CHI 2019*. Glasgow, UK, 2019.

[P.11] **Abraham Glasser**. “Automatic Speech Recognition Services: Deaf and Hard-of-Hearing Usability”. In *NTID Student Research Fair*, Rochester, NY, USA, 2019.

[P.10] **Abraham Glasser** and Bonnie Jacob. “Failed Power Domination on Knödel Graphs”. In *NTID Student Research Fair*, Rochester, NY, USA, 2019.

[P.9] **Abraham Glasser**, Alex Kramer, Harshad Golwalkar, Ruiwen Fan, Shuishi Fang, Oliver Alonzo, and Matt Huenerfauth. “Collection of Training Data for a Video-Based Search Tool for ASL Dictionaries”. In *RIT AI@GCCIS Showcase*, Rochester, NY, USA, Oct. 2018.

[P.8] Larwan Berke, Matt Seita, **Abraham Glasser**, Sushant Kafle, and Matt Huenerfauth. “Preferences and Requirements of Deaf and Hard-of-Hearing Users for Captions Generated through Automatic Speech Recognition”. In *RIT AI@GCCIS Showcase*, Rochester, NY, USA, Oct. 2018.

[P.7] Oliver Alonzo, **Abraham Glasser**, Peter Yeung, and Matt Huenerfauth. “Adapting Reading-Assistance and Automatic Text-Simplification Tools to Assist Self-Directed Learning by Deaf and Hard-of-Hearing Computing Workers”. In *RIT AI@GCCIS Showcase*, Rochester, NY, USA, Oct. 2018.

[P.6] Peter Yeung, **Abraham Glasser**, and Matt Huenerfauth. “Video and 3D Depth Training Data Collection for Sign-Language Computer Vision Models, in Support of Linguistics Research”. In *RIT AI@GCCIS Showcase*, Rochester, NY, USA, Oct. 2018.

[P.5] **Abraham Glasser**, Kesavan R. Kushalnagar, and Raja S. Kushalnagar. “Feasibility of Using Automatic Speech Recognition with Voices of Deaf and Hard-of-Hearing Individuals”. In *Council on Undergraduate Research (CUR) Undergraduate Symposium*, Alexandria, VA, USA, Oct. 2018.

[P.4] **Abraham Glasser**, Kabo Cheung, Chris Campbell, and Brian Trager. “Evaluating the Use of Automatic Speech Recognition for Lectures with Multiple Modalities”. In *NTID Student Research Fair*, Rochester, NY, USA, 2018.

[P.3] Emily Lederman, **Abraham Glasser**, and Bonnie Jacob. “Mathematical determination of the worst case scenario for monitoring electric power networks”. In *NTID Student Research Fair*, Rochester, NY, USA, 2018.

[P.2] **Abraham Glasser** and Raja S. Kushalnagar. “Sign Language Recognition Using the Kinect”. In *RIT Undergraduate Symposium*, Rochester, NY, USA, 2017.

[P.1] **Abraham Glasser** and Raja S. Kushalnagar. “Automatic Speech Recognition: Relationship Between Text Readability and Word Error Rate”. In *RIT Undergraduate Symposium*, Rochester, NY, USA, 2016.

Other Publications

[O.3] Richard E. Ladner, Caitlyn Seim, Ather Sharif, Naba Rizvi, and **Abraham Glasser**. “Experiences of Computing Students with Disabilities”. In *Proceedings of the 52nd ACM Technical Symposium on Computer Science Education*, SIGCSE ’21, pages 939–940, Virtual Event, USA. Association for Computing Machinery, 2021. DOI: 10.1145/3408877.3432574.

[O.2] **Abraham Glasser** and Bonnie Jacob. “Failed Power Domination on Knödel Graphs”. In *50th Southeastern International Conference on Combinatorics, Graph Theory & Computing*, Boca Raton, FL, USA, 2019.

[O.1] **Abraham Glasser**, Bonnie Jacob, and Emily Lederman. "Failed Power Domination: Computational Results, Extreme Values, and Complexity". In *Mathematical Association of America (MAA) Seaway Section Meeting Student Talks*, Brockport, NY, USA, 2018.

Academic Awards & Honors

Impact Award for paper at ACM CSCW'22 2022
Best Paper Nominee (x2) at ACM ASSETS 2021 2021
Best Poster Award at ACM VRST 2019 2019
First Place in ACM CHI 2019 Student Research Competition 2019
NTID Outstanding Graduate Award [top 1% of students] 2019
NSF Graduate Research Fellowship Program (GRFP) Honorable Mention 2018

Service to the Profession

Accessibility Chair, ACM ASSETS conference 2024
Associate Chair, ACM CHI conference 2024
Reviewer, ACM CHI conference 2020, 2021, 2022, 2023, 2024
Participant, CMD-IT Academic Careers Workshop 2022
Participant, CRA-WP IDEALS workshop 2022
Reviewer, UAIS Journal 2022
Reviewer, ACM ASSETS conference 2022
Reviewer, AMTA conference 2022
Reviewer, UAAI journal 2022
Program Committee & Reviewer, ACM CUI conference 2022
Reviewer, ACM UIST conference 2022
Reviewer, ACM TALLIP journal 2022
Reviewer, ACM CSCW conference 2022
Session Chair, ACM ASSETS conference 2021
Program Committee & Reviewer, 1st International Workshop on Automatic Translation for Signed and Spoken Languages (AT4SSL@MTSummit2021) 2021
Mentor, CREST FEST, https://www.crest-network.com/fest 2021
Reviewer, ACM TACCESS journal 2021
Participant, Inclusion@RSS 2020
Participant, AI Fairness Workshop, ACM SIGACCESS ..... October 2019
Member, XRACCESS Initiative, https://www.xraccess.org/ ..... July 2019
Member, ACM, SIGACCESS, SIGCHI ..... Since 2018

Invited Talks

Panelist. EMNLP 2023 conference keynote panel:
"Beyond Text: Inclusive Human Communication

with Language Technology" ..... December 2023
Panelist. Gallaudet University workshop: *Research and Graduate School: Exploring Computing and Information Sciences/Technology Research for Deaf and Hard-of-Hearing*. ..... April 2022
Guest presenter. CREST Network Talk Series. ..... March 2022
Panelist. Gallaudet University AI & Sign Language Workshop ..... September 2021
Panelist. *Disability Disclosure in Education and Employment*, TAPIA'21 . September 2021
Guest presenter. Microsoft Ability Summit. *3 Years of AI Innovations* ..... May 2021
Panelist. *Experiences of Computing Students with Disabilities*, SIGCSE'21 ... March 2021
Panelist. AccessCSforAll Professional Development Workshop ..... July 2019
Guest presenter. RIT REU Graduate Study and Research Symposium ..... June 2019

Miscellaneous & Media

- Microsoft blog post about dissertation work: https://blogs.microsoft.com/accessibility/the-opportunity-at-home-can-ai-drive-innovation-in-personal-assistant-devices-and-sign-language/, May 2022.
- WXXI Rochester NY "CITY" Magazine, article *Becoming Helen Keller*, also appeared on PBS via WXXI-TV. October 2021. https://fb.watch/8H_Hm1czF_/
- AccessComputing Student Profile: https://www.washington.edu/accesscomputing/resources/accesscomputing-news-july-2020/accesscomputing-student-profile-abraham-glasser
- Featured on NTID frontpage "We are creating the most powerful, successful network of deaf and hard-of-hearing professionals in the world." https://www.rit.edu/ntid/opportunities
- Featured in RIT/NTID overview brochure for prospective students
- "Kudos" from NTID President's office for research work. November 2020. https://www.rit.edu/ntid/president/updates/nov2020
- RIT "Newsmaker": *"Student wins Best Poster Award"*. November 2019.
- RIT "Newsmaker" – Featured in RIT news article about taking first place in the ACM CHI Student Research Competition. July 2019. https://www.rit.edu/ritnews/nandedaily.php?date=07%2F18%2F2019
- RIT article *"NTID students graduate with accolades"*. May 2019.
- RIT article *"RIT/NTID provides groundwork for grads moving on to doctoral degree programs"*. May 2019.
- RIT article *"RIT/NTID Student Research Fair touts cutting-edge work of undergraduate, graduate students"*, April 2018.
- RIT article *"Researchers make big splash at computing accessibility conference"*, November 2017.
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