






Curriculum Vitae

Raja S. Kushalnagar, J.D., LL.M., Ph.D.




1. Personal Information

Name	Raja S. Kushalnagar
Program	Information Technology
Department	Science, Technology and Mathematics
Rank	Associate Professor
Year of University Appointment to current rank	2016




1.a. Education

Ph.D., Computer Science University of Houston	2010	
LL.M., Intellectual Property and Information Law University of Houston	2010	
J.D., cum laude Texas Southern University	2008	
M.S., Computer Science Rochester Institute of Technology	1999	
B.S., Applied Physics Angelo State University	1994	

1.b. Certifications

American Sign Language Proficiency Interview (ASLPI): 3+		2016
Sign Language Proficiency Interview (SLPI): Advanced+ to Superior+		2013
Certified Information Systems Security Professional (CISSP)		2001

1.c. Employment Background

Assistant Professor, Dept of Information and Computing Studies	2011-2016	
Instructor, Dept of Information and Computing Studies	2010-2011	
Rochester Institute of Technology, Rochester, NY		
Information Protection Manager, Gallaudet Technology Services	2000-2002	
Gallaudet University, Washington DC		
Member of Technical Staff I, Bell Laboratories, Lucent Technologies	1997-2000	
Bell Laboratories at Lucent Technologies, Naperville, IL		

2. Research, Scholarly & Creative Activities

1.a. Books.

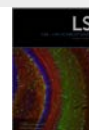
1.a.i. Chapters in books.








1. Raja S. Kushalnagar. 2020. Mobile Banking in India. In *Accessible Technology and the Developing World* (Ch. 14). Jonathan Lazar & Michael Stein (Eds.). Philadelphia, PA. Penn Press. <https://doi.org/>
2. Raja S. Kushalnagar. 2019. *Deafness and Hearing Loss*. In *Web Accessibility – A Foundation for Research* (Ch 3). Simon Harper and Yeliz Yesilada (Eds.). Human–Computer Interaction Series. Springer, London. https://doi.org/10.1007/978-1-4471-7440-0_3
3. Raja S. Kushalnagar. 2017. *Who Owns Captioning?* In *Disability, Human Rights, and Information Technology* (Ch. 11). Jonathan Lazar & Michael Stein (Eds.). Philadelphia, PA. Penn Press. ISBN: 9780812294095. <http://www.upenn.edu/pennpress/book/15640.html>
4. Khadijat Rashid, Poorna Kushalnagar & Raja S. Kushalnagar. 2011. *How Deaf Adult Signers Experience Implants: Some Preliminary Conclusions*. In Irene W. Leigh & Raylene Paludneviene (Eds.), *Cochlear Implants: Evolving Perspectives* (pp. 45–59). Washington, D.C.: Gallaudet University Press. ISBN: 9781563685033. <http://gupress.gallaudet.edu/excerpts/CItoc.html>



1.a.ii. Articles in Peer-Reviewed Journals.


1. Gabriella Wojtanowski, Colleen Gilmore, Barbra Seravalli, Kristen Fargas, Christian P. Vogler and Raja S. Kushalnagar. 2020. *Alexa, Can You See Me? Making Individual Personal Assistants for the Home Accessible to Deaf Consumers*. *Journal on Technology and Persons with Disabilities*, Aug 2020, 9(10), 128–146. <http://hdl.handle.net/10211.3/215984>
2. Poorna Kushalnagar, Raylene Paludneviene, and Raja S. Kushalnagar. 2019. *Video Remote Interpreting Technology in Health Care: Cross-Sectional Study of Deaf Patients' Experiences*. *JMIR Rehabilitation Assistive Technology* 2019; 6(1), e13233. <https://doi.org/10.2196/13233>
3. Athena Willis, Elizabeth Codick, Patrick Boudreault, Christian P. Vogler, Raja S. Kushalnagar. 2019. *Multimodal Visual Languages User Interface for Deaf Readers*. *Journal on Technology and Persons with Disabilities*, Aug 2019, 7(16), 172–182. <http://hdl.handle.net/10211.3/210399>
4. Jason Rodolitz, Evan Gambill, Brittany Willis, Christian P. Vogler and Raja S. Kushalnagar. 2019. *Accessibility of Voice-Activated Agents for People who are Deaf or Hard of Hearing*. *Journal on Technology and Persons with Disabilities*, Oct 2019, 7(16), 144-156. <http://hdl.handle.net/10211.3/210397>
5. Halley P. Profita, Abigale Stangl, Laura Matuszewska, Sigrunn Sky, Raja S. Kushalnagar and Shaun K. Kane. 2018. “Wear it Loud”: *How and Why Hearing Aid and Cochlear Implant Users customize their Devices*. *ACM Transactions on Accessible Computing*, Oct 2018, (11)3. <https://dl.acm.org/10.1145/3214382>
6. Derek C. Braun, M. Diane Clark, Amber E. Marchut, Caroline M. Solomon, Megan Majocha, Zachary Davenport, Raja S. Kushalnagar, Jason Listman, Peter C. Hauser, and Cara Gormally. 2018. *Welcoming Deaf Students into STEM: Recommendations for University Science Education*. *CBE—Life Sciences Education*, Sep 2018, 17(3). <https://doi.org/10.1187/cbe.17-05-0081>





7. Poorna Kushalnagar, Scott S. Smith, Melinda Hopper, Claire E. Ryan, Micah Rinkevich and Raja S. Kushalnagar. 2018. *Making Cancer Health Text on the Internet Easier to Read for Deaf People Who Use American Sign Language*. *Journal of Cancer Education*, Feb 2018, 33(1), 134-140. <http://doi.org/10.1007/s13187-016-1059-5> 
8. Poorna Kushalnagar, Claire E. Ryan, Steven Smith and Raja S. Kushalnagar. 2017. *Critical health literacy in American deaf college students*. *Health Promotion International*, May 2017. <https://doi.org/10.1093/heapro/dax022> 
9. Linda G. Gottermeier, Carol L. De Filippo, Raja S. Kushalnagar & Bonnie L. Bastian. 2016. User Evaluation of Automatic Speech Recognition Systems for Deaf-Hearing Interactions at School and Work. *Audiology Today*, Mar 2016, 28(2), 20–34. ISSN: 1534-2609. 
10. Raja S. Kushalnagar & Jenna A. Tart. 2016. A Survey on Video Relay Service Application Interface Preferences. *Journal on Technology and Persons with Disabilities*, 4(22), 223–232. Retrieved from <http://hdl.handle.net/10211.3/180129> 
11. Raja S. Kushalnagar. 2015. Optimal Viewing Distance between Deaf Viewers and Interpreters. *Journal on Technology and Persons with Disabilities*, 3(22), 246–56. Retrieved from <http://hdl.handle.net/10211.3/151199> 
12. Henry Adler, Bonnie Jacob, Kim Kurz & Raja S. Kushalnagar. 2014. Undergraduate Research in Mathematics with Deaf and Hard of Hearing Students: Four Perspectives. *Involve: A Journal of Mathematics*, 7(3), 247–264. <http://doi.org/10.2140/involve.2014.7.247> 
13. Raja S. Kushalnagar, Walter S. Lasecki & Jeffrey P. Bigham. 2014. Accessibility Evaluation of Classroom Captions. *ACM Transactions on Accessible Computing*, 5(3), 1–24. <http://doi.org/10.1145/2543578> 
14. Thomas Humphries, Raja S. Kushalnagar, Gaurav Mathur, Donna Jo Napoli, Carol Padden, Christian Rathmann & Scott Smith. 2013. The right to language. *The Journal of Law, Medicine & Ethics: A Journal of the American Society of Law, Medicine & Ethics*, 41(4), 872–884. <http://doi.org/10.1111/jlme.12097> 

1.b. Monographs and Reports

1.b.i. Monographs

1. Raja S. Kushalnagar. 2014. *Designing an Accessible Broadband Peer Community for Students with Sensory Disabilities*. Time Warner Cable: Research Program on Digital Communications. <http://www.twcresearchprogram.com/publications.php> 

1.b.ii. Reports

1. Richard E. Ladner, Harry G. Lang. & Raja S. Kushalnagar. 2013. Technical Resources Available for STEM Students. *Workshop for Emerging Deaf and Hard of Hearing Scientists*, 43–52. <http://doi.org/10.13140/2.1.4634.7201> 
2. Raja S. Kushalnagar. 2009. Balancing Perceptually Disabled Consumers' Rights Against Copyright Holders' Rights. *SSRN Electronic Journal*, 1–35. <http://doi.org/10.2139/ssrn.1475449> 

1.c. Book Reviews, Other Articles, Notes.

1.d. Presentations, Abstracts, and Other Professional Papers Presented.




1.d.i. *Invited Presentations, workshops etc.*

1. Promiti Datta*, Pablo Jakubowicz*, Amit Balchandani*, Abraham Glasser*, Kirsten Fargas*, Christian Vogler and Raja Kushalnagar. 2019. *Impact of Punctuation Quality on User Experience in Closed Captioning*. Gallaudet Undergraduate Symposium. Washington, DC, Aug 2, 2019. 
2. Edward Riley*, Kaitlyn Weeks*, Abraham Glasser*, Kirsten Fargas*, Christian Vogler and Raja S. Kushalnagar. 2019. *Comparison of Speaker Cues for Deaf Viewers in Virtual Reality*. Gallaudet Undergraduate Symposium. Washington, DC, Aug 2, 2019. 
3. Joseline Garcia*, Chang Jun-Hwang*, Abraham Glasser*, Kirsten Fargas*, Christian Vogler and Raja Kushalnagar. 2019. *Effect of Speech Speed and Caption Width on Deaf and Hard of Hearing User Experience for Live TV*. Gallaudet Undergraduate Symposium. Washington, DC, Aug 2, 2019. 
4. Christina Mai*, Rachel Robinson*, Linda Kozma-Spytek, Kirsten Fargas, Abraham Glasser, Christian Vogler and Raja Kushalnagar. 2019. *Analysis of Difficulties and Needs Concerning Users of Hearing Assistive Technology*. Gallaudet Undergraduate Symposium. Washington, DC, Aug 2, 2019. 
5. Chloe Keilers*, Carrie Bergstedt*, Linda Kozma-Spytek, Kirsten Fargas*, Abraham Glasser*, Christian Vogler and Raja Kushalnagar. 2019. *Speech to Text: STT Studying the Impact of Captioning Delays on User Understanding*. Gallaudet Undergraduate Symposium. Washington, DC, Aug 2, 2019. 
6. Gabriella Wojtanowski*, Colleen Gilmore*, Barbra Seravalli*, Kirsten Fargas*, Christian Vogler and Raja S. Kushalnagar. 2019. *Alexa, Can You See Me? Making Interactive Personal Assistants for the Home Accessible to Deaf and Hard of Hearing Consumers*. Gallaudet Undergraduate Symposium. Washington, DC, Aug 2, 2019. 
7. Raja S. Kushalnagar. 2018. *Accessible Technology and the Developing World*. Radcliffe Institute for Advanced Study, Harvard University, Boston, MA. <https://goo.gl/j2h4wz> 
8. Becca Dingman*, Eli Litwack*, Linda Kozma-Spytek, Christian Vogler and Raja S. Kushalnagar. 2018. *Impact of Wideband and Narrowband Audio on Phone Conversations by Hard-of-Hearing Users*. Gallaudet Undergraduate Symposium. Washington, DC, July 27, 2018. 
9. Athena Willis*, Elizabeth Codick*, Patrick Boudreault, Christian Vogler and Raja S. Kushalnagar. 2018. *Multimodal Visual Languages User Interface (M3UI)*. Gallaudet Undergraduate Symposium. Washington, DC, July 27, 2018. 
10. Jacob Rhoades*, Landrie Tchakuoa*, Norman Williams, Christian Vogler and Raja S. Kushalnagar. 2018. *Captioned Video Relay Service – Evaluating the Use of Automatic Speech Recognition Captioning on Video Relay Service*. Gallaudet Undergraduate Symposium. Washington, DC, July 27, 2018. 
11. Evan Gambill*, Jason Rodolitz*, Brittany Willis*, Christian Vogler and Raja S. Kushalnagar. 2018. *Accessibility of voice-activated agents for people who are deaf or hard of hearing*. Gallaudet Undergraduate Symposium. Washington, DC, July 27, 2018. 
12. Andrew Biskupiak, Poorna Kushalnagar, Christian Vogler and Raja S. Kushalnagar. 2018. *System Usability Scale in American Sign Language-Revised (SUS-ASL_R)*. Gallaudet Undergraduate Symposium. Washington, DC, July 27, 2018. 
13. Abraham Glasser and Raja S. Kushalnagar. 2017. *Sign Language Recognition Using the Kinect*. RIT Undergraduate Symposium. Rochester, NY. Aug 5, 2017. 
14. Alexandra LeClerc, Grace McPherson, P Garcia, Vicki Hanson and Raja S. Kushalnagar. 2017. *Smart Glasses for Classroom Accessibility for Deaf and Hard of Hearing Students*. RIT Undergraduate Symposium. Rochester, NY. Aug 5, 2017. 









15. Becca Dingman, Thomas Mulally and Raja S. Kushalnagar. 2017. *Improved Tracked Captioning: Identifying speakers when using pop-up style captions*. RIT Undergraduate Symposium. Rochester, NY. Aug 5, 2017. 
16. Benjamin Kassman, Matt Huenerfauth, Michael Stinson and Raja S. Kushalnagar. 2017. *Errors in Automatic Speech Recognition*. RIT Undergraduate Symposium. Rochester, NY. Aug 5, 2017. 
17. Catherine Seita, Matt Huenerfauth, Michael Stinson and Raja S. Kushalnagar. 2017. *The Effects of Using Automatic Speech Recognition on Speaking Behavior*. RIT Undergraduate Symposium. Rochester, NY. Aug 5, 2017. 
18. Jaron Rehkop, Michael Stinson, Matt Huenerfauth and Raja S. Kushalnagar. 2017. *Correction of Speech Recognition Errors by Users of Group Communication Aids*. RIT Undergraduate Symposium. Rochester, NY. Aug 5, 2017. 
19. Jason Antal, Michael Stinson, Matt Huenerfauth and Raja S. Kushalnagar. 2017. *User Experiences with Automatic Speech Recognition*. RIT Undergraduate Symposium. Rochester, NY. Aug 5, 2017. 
20. Kesavan Kushalnagar, Gary Behm and Raja S. Kushalnagar. 2017. *Predicting ASL Signs Using Hand Positions*. RIT Undergraduate Symposium. Rochester, NY. Aug 5, 2017. 
21. Shareef Ali and Raja S. Kushalnagar. *Animating 3D Skeleton from Kinect XML Database*. RIT Undergraduate Symposium. Rochester, NY. Aug 5, 2017. 
22. Kevin Wolfe and Kushalnagar, R., *Improved Tracking Caption – Identifying the Speaker from the Panel via Pointing Caption*. RIT Undergraduate Symposium. Rochester, NY. Aug 5, 2017. 
23. A Spring, Larwan Berke, Matt Huenerfauth, Michael Stinson and Raja Kushalnagar. 2016. *Usability Testing of ASR App*. RIT Undergraduate Symposium. Rochester, NY. Aug 7, 2016. 
24. Abraham Glasser and Raja Kushalnagar. 2016. *Automatic Speech Recognition: Relationship between Text Readability and Word Error Rate*. RIT Undergraduate Symposium. Rochester, NY. Aug 7, 2016. 
25. Joan Malasig, Brenda Castro, Ashley Miller, Alessandra Brandao, Vicki Hanson, Hugo Nicolao and Raja Kushalnagar. 2016. *The Effects of Smart Glasses on Lecture Comprehension for the Deaf and Hard of Hearing*. RIT Undergraduate Symposium. Rochester, NY. Aug 7, 2016. 
26. Claire Ryan, Poorna Kushalnagar and Kushalnagar, R. 2016. *Using Social Network Sites for Health-Related Purposes: Comparison of Deaf and Hearing Users*. RIT Undergraduate Symposium. Rochester, NY. Aug 7, 2016. 
27. Daniel Saavedra, Larwan Berke, Matt Huenerfauth, Michael Stinson and Raja Kushalnagar. 2016. *Hearing People in Caption Markup*. RIT Undergraduate Symposium. Rochester, NY. Aug 7, 2016. 
28. Karina Bercan and Raja Kushalnagar. 2016. *Tracked Captioning: Improving Engagement for Deaf Audiences During Live Discussions*. RIT Undergraduate Symposium. Rochester, NY. Aug 7, 2016. 
29. Kayla Vodacek and Kushalnagar, R. 2016. *Comparing Automatic Speech Recognition Word Error Rates for Speech & Signs*. RIT Undergraduate Symposium. Rochester, NY. Aug 7, 2016. 
30. Kevin Rathbun, Michael Stinson, Matt Huenerfauth, Larwan Berke and Raja Kushalnagar. 2016. *Fixation Patterns of Deaf and Hard of Hearing While Viewing Captioning Generated by Automatic Speech Recognition*. RIT Undergraduate Symposium. Rochester, NY. Aug 7, 2016. 
31. Matthew Seita and Raja Kushalnagar. 2016. *Closed Interpreting: An Eye-Tracking Analysis*. RIT Undergraduate Symposium. Rochester, NY. Aug 7, 2016. 
32. Paul Bayruns, Matt Huenerfauth, Michael Stinson, Larwan Berke and Raja Kushalnagar. 2016. *ASR Confidence-Markup Captioning in Multi-Person Conversations*. RIT Undergraduate Symposium. Rochester, NY. Aug 7, 2016. 




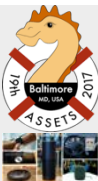



33.	Paul Price, Peter Yeung, Gary Behm and Raja Kushalnagar. 2016. Web Accessibility for Deaf Senior Citizens. RIT Undergraduate Symposium. Rochester, NY. Aug 7, 2016.	
34.	Susie Harvey and Raja Kushalnagar. 2016. Tracked Captioning for the Hard-of-Hearing: Determining Optimal Accessibility with Listener's Fatigue. RIT Undergraduate Symposium. Rochester, NY. Aug 7, 2016.	
35.	Turner, T., Behm, G. and Kushalnagar, R. 2016. Tracked Captioning: Panel Discussion. RIT Undergraduate Symposium. Rochester, NY. Aug 7, 2016.	
36.	James Waller and Raja Kushalnagar. 2016. Distribution of Sign Location in ASL. RIT Undergraduate Symposium. Rochester, NY. Aug 7, 2016.	
37.	Eric Epstein and Raja Kushalnagar. Using the Kinect to classify signs by movement. RIT Undergraduate Symposium. Rochester, NY. Aug 4, 2015.	
38.	Fadi Haddad and Raja Kushalnagar, Raja. 2015. SingleScreenFocus. RIT Undergraduate Symposium. Rochester, NY. Aug 4, 2015.	
39.	James Waller and Raja Kushalnagar. 2015. Automatic Segmentation of Captions. Rochester, NY. Aug 4, 2015.	
40.	Jenna Tart and Raja Kushalnagar. 2015. Reforming Video Relay Service: A Focus on the Development of Video Relay Prototypes. RIT Undergraduate Symposium. Rochester, NY. Aug 4, 2015.	
41.	Mary Rose Weber and Kushalnagar, R. 2015. Analysis of Tracked Interpreter Display. RIT Undergraduate Symposium. Rochester, NY. Aug 4, 2015.	
42.	Matthew Seita, and Kushalnagar, R. 2015. Introducing Closed ASL Interpreting with Online Videos. RIT Undergraduate Symposium. Rochester, NY. Aug 4, 2015.	
43.	Jamie Simpson, Wilmot Merchant, Stephanie Ludi and Kushalnagar, R. 2015. Audio Cues in a Visual Programming Environment. Real-Time Tracking Display. RIT Undergraduate Symposium. Rochester, NY. Aug 4, 2015.	
44.	Ben Polstra, Victor Ortiz, Alessandro Barbao, Vicki Hanson, and R. Kushalnagar. 2015. Potential Utilization of the Smart Glasses as a Vehicle of Accessibility in College Classrooms. RIT Undergraduate Symposium. Rochester, NY. Aug 4, 2015.	
45.	Shareef Ali, Gary Behm, Aaron Kelstone, Raja Kushalnagar, Jason Lee, Brian Trager and Mary Rose Weber. 2015. Real-Time Tracking Display. RIT Undergraduate Symposium. Rochester, NY. Aug 4, 2015.	
46.	Raja S. Kushalnagar 2015. Accessibility and Usability in Health Information Technology (HIT): A Research & Action Conference to Empower People with Disabilities, Older Adults, and Caregivers. Interagency Committee on Disability Research and Interagency Committee on Assistive Technology. September 17-18, 2015, Washington, DC. https://goo.gl/CJc7F7	
47.	Raja S. Kushalnagar. 2015. Frontiers in US Law: Equal Access to Info Tech for People with Disabilities. Radcliffe Institute for Advanced Study, Harvard University, Boston, MA. https://goo.gl/tt2hcL	
48.	Raja S. Kushalnagar & Marc Richert. 2015. Latest Trends in IP Law & Information Access – The 2015 Update. In 30th Annual International Technology and Persons with Disabilities Conference. San Diego, CA. http://goo.gl/nNo3kY	
49.	Raja S. Kushalnagar. 2015. Accessible Presentations for Deaf and Hard of Hearing Students. Rochester, NY. https://goo.gl/PP59fL	
50.	Mark Rosica & Raja S. Kushalnagar. 2015. Deaf and Hard of Hearing Students in Your Classroom. Rochester, NY. https://goo.gl/PP59fL	
51.	Raja S. Kushalnagar. 2014. Faculty and Students Doing Research Together. Rochester, NY.	
52.	Raja S. Kushalnagar. 2014. Accessible Views: Seeing Lectures through Deaf Students' Eyes. Destination Intersession 2014 and RIT's got Talent. Rochester, NY. Retrieved from http://goo.gl/wXSLHo	

53.	Raja S. Kushalnagar. 2013. ASL-STEM: Community Development of Signs for STEM. In International Pacific Rim Conference on Disabilities. Honolulu, HI. Retrieved from http://goo.gl/FhmGVs	
54.	Raja S. Kushalnagar, Brian P. Trager & Karen J. Beiter. 2013. Accessible Viewing Devices for Deaf and Hard of Hearing Students. In Convention of American Instructors of the Deaf. Rochester, NY. Retrieved from http://goo.gl/ZTqnoz	
55.	Raja S. Kushalnagar. 2013. Leveraging Copyright Law to Improve Accessibility for Perceptually Disabled Consumers for resources such as ASL-STEM. In Cherry Blossom Symposium on Intellectual Property and Federal Policy: Universal Access in the Digital Environment. Washington, D.C. Retrieved from https://goo.gl/81IVjU	
56.	Sandra Connolly, Ann Hager, Anne M. Kuntz, Raja S. Kushalnagar & Samantha Shupe*. 2013. Working with Deaf and Hard of Hearing Students Panel. Rochester, NY. Retrieved from http://goo.gl/Ioh8eN	
57.	Joshua Beal, Karen Alkoby, David Fourney, Raja S. Kushalnagar, Ronald Painter & Minoru Yoshida. (2008). Member of Student Working Group, Summit to Create a Cyber-Community to Advance Deaf and Hard of Hearing Individuals in STEM (DHH Cyber-Community). Rochester, NY. Retrieved from http://goo.gl/gUBzbJ	
58.	Raja S. Kushalnagar. 2014. Accessible Views: Seeing Lectures through Deaf Students' Eyes. Rochester, NY. Retrieved from http://goo.gl/wXSLHo	
59.	Raja S. Kushalnagar. 2013. Graduate School STEM Programs: Important Factors to consider for Deaf and Hard of Hearing Students. In 2013 Summer Academy for Deaf and Hard of Hearing Students. Seattle, WA.	
60.	Raja S. Kushalnagar. 2013. The First Internet Worm - Morris Worm. In Society of Software Engineers, Rochester Institute of Technology. Rochester, NY. Retrieved from http://youtu.be/YnUkyqawuWU	
61.	Raja S. Kushalnagar. 2012. Life as a Deaf Graduate Student in STEM before and after the Americans with Disabilities Act, 1992. In 2012 Summer Academy for Deaf and Hard of Hearing Students. Seattle, WA.	
62.	Raja S. Kushalnagar. 2012. Accessible Viewing for Deaf and Hard of Hearing Students. In Department of Communications and Culture, Ryerson University. Toronto, ON.	
63.	Raja S. Kushalnagar & Joseph S. Stanislow. 2012. Maximizing Content Learning for English as a Second Language Students. In New York Society of Engineering Technology Association. Rochester, NY. Retrieved from https://goo.gl/ONnk9R	
64.	Raja S. Kushalnagar. 2012. Accessible Viewing Device: Video Compression. In 5th Academic Career Workshop for Underrepresented Ethnic Minorities and People with Disabilities. Atlanta, GA, March 15-18. https://goo.gl/SDxF8f	
65.	Raja S. Kushalnagar. 2011. Deaf and Hard of Hearing STEM Students in Graduate School. In 2011 Summer Academy for Deaf and Hard of Hearing Students. Seattle, WA.	
66.	Raja S. Kushalnagar & Brian P. Trager. 2011. Multiple Video Recordings: NTID Supported Classroom Recording Accessibility. In RIT Faculty Institute on Teaching and Learning Conference. Rochester, NY.	
67.	Raja S. Kushalnagar. 2011. Multiple Views: Enhanced Medical Interpreter Accessibility for Deaf Signers. In Rochester General Hospital System - Rochester Institute of Technology Conference. Rochester, NY.	
68.	Raja S. Kushalnagar. 2010. Multiple Viewing Perspectives: Java Enabled Webcams. In 3rd Academic Career Workshop for Underrepresented Minorities and People with Disabilities. Houston, TX, March 5-7. https://goo.gl/1V2YB4	
69.	Raja S. Kushalnagar. 2010. Empowering Mainstreamed Deaf Students with Multiple Video Perspectives. In Technology and Deaf Education: Exploring Instructional and Access Technologies Symposium. Rochester, NY.	

70. Raja S. Kushalnagar. 2010. The Overview of Patents and Trademarks: Intellectual Property for Deaf Businesses. In 2010 Business Conference Expo for the Deaf. Houston, TX. 
71. Raja S. Kushalnagar. 2008. Impact of the Copyright Limitation for Sensory Disabilities on Assistive Technology. In 2008 International Conference for High Performance Computing, Networking, Storage and Analysis. Austin, TX. 
72. Raja S. Kushalnagar. 2007. Perceptions of Deaf and Hard of Hearing Students: The barriers faced during classes and job searches & their resulting adaptations and choices. In 2007 International Conference for High Performance Computing, Networking, Storage and Analysis. Reno, NV. 

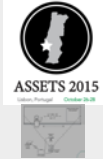
1.d.ii. Refereed conference proceedings.


1. Promiti Datta, Pablo Jakubowicz, Christian Vogler and Raja Kushalnagar. Readability of punctuation in both automatic and human-generated subtitles. In Computers Helping People with Special Needs – ICCHP 2020. Vienna, Austria. Springer-Verlag. 
1. Danielle Bragg, Meredith Ringel Morris, Christian Vogler, Raja Kushalnagar, Matt Huenerfauth, and Hernisa Kacorri. 2020. Sign Language Interfaces: Discussing the Field’s Biggest Challenges. In *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems*, 1–5. <https://doi.org/10.1145/3334480.3381053> 
2. Panneer Santhalingam, Yuanqi Du, Riley Wilkerson, Al Amin Hosain, Ding Zhang, Parth Pathak, Huzefa Rangwala and Raja Kushalnagar. *Expressive ASL Recognition using Millimeter-wave Wireless Signals*. In IEEE SECON 2020. 
3. Abraham Glasser, Edward Mason Riley, Kaitlyn Weeks, and Raja Kushalnagar. 2019. *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). ACM, New York, NY, USA. DOI: <https://doi.org/10.1145/3359996.3364720> 
4. Raja Kushalnagar. 2019. *A Classroom Accessibility Analysis App for Deaf Students*. In ASSETS '19 – The 21st International ACM SIGACCESS Conference on Computers and Accessibility. <https://doi.org/10.1145/3308561.3354640> 
5. Leah Findlater, Bonnie Chinh, Dhruv Jain, Jon Froehlich, Raja Kushalnagar, and Angela Carey Lin. 2019. *Deaf and Hard-of-hearing Individuals’ Preferences for Wearable and Mobile Sound Awareness Technologies*. In *2019 CHI Conference on Human Factors in Computing Systems - CHI '19*, 1–13. <https://doi.org/10.1145/3290605.3300276> 
6. Jonathan Lazar, Raja Kushalnagar, Casey Fiesler, and G. Anthony Giannoumis. 2019. *Introduction to Legal Issues in Human-Computer Interaction*. In Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems - CHI EA '19, 1–5. <https://doi.org/10.1145/3290607.3298818> 
7. Raja S. Kushalnagar. 2018. *Legibility of Videos with ASL signers*. In Proceedings of the 2018 ICT Accessibility Testing Symposium: Mobile Testing, 508 Revision, and Beyond. Arlington, VA. <https://goo.gl/GPbke7> 
8. Danielle K. Bragg*, Raja S. Kushalnagar and Richard E. Ladner. 2018. *Designing an Animated Character System for American Sign Language*. In 20th International ACM SIGACCESS Conference on Computers and Accessibility – ASSETS '18. Galway, Ireland. ACM Press. <https://doi.org/10.1145/3234695.3236338> 


9. Dhruv Jain*, Rachel Franz*, Leah Findlater, Jackson Cannon, Raja S. Kushalnagar and Jon E. Froehlich. 2018. *Towards Accessible Conversations in a Mobile Context for People who are Deaf and Hard of Hearing*. In 20th International ACM SIGACCESS Conference on Computers and Accessibility – ASSETS '18. Galway, Ireland. ACM Press. <https://doi.org/10.1145/3234695.3236362> 
10. Raja S. Kushalnagar and Kesavan R. Kushalnagar*. 2018. *SubtitleFormatter: Making Subtitles Easier to Read for Deaf and Hard of Hearing Viewers on Personal Devices*. In Computers Helping People with Special Needs – ICCHP 2018. Vienna, Austria. Springer-Verlag. https://doi.org/10.1007/978-3-319-94277-3_35 
11. Raja S. Kushalnagar, Gary W. Behm, Kevin T. Wolfe*, Peter Yeung*, Becca Dingman*, Shareef S. Ali*, Abraham T. Glasser* and Claire E. Ryan*. 2018. *RTTD-ID: Tracked Captions with Multiple Speakers for Deaf Students*. In 125th ASEE Annual Conference & Exposition. Salt Lake City, UT. ASEE Conferences. <https://peer.asee.org/30945> 
12. Raja S. Kushalnagar and Gary W. Behm. 2018. *A Transition Community for Deaf and Hard of Hearing Students in Engineering Programs*. In 125th ASEE Annual Conference & Exposition. Salt Lake City, UT. ASEE Conferences. <https://peer.asee.org/29742> 
13. Dhruv Jain*, Bonnie Chinh*, Raja Kushalnagar, Leah Findlater and Jon E. Froehlich. 2018. *Exploring Augmented Reality Approaches to Real-Time Captioning: A Preliminary Autoethnographic Study*. In 12th ACM SIGCHI Conference on Designing Interactive Systems - DIS 2018. Hong Kong, CN. ACM Press. <https://doi.org/10.1145/3197391.3205404> 
14. Jeffrey P. Bigham, Raja Kushalnagar, Ting-Hao Kenneth Huang, Juan Pablo Flores, Saiph Savage. 2017. *On How Deaf People Might Use Speech to Control Devices*. In 19th International ACM SIGACCESS Conference on Computers and Accessibility – ASSETS '17. Baltimore, MD, USA. ACM Press. <https://doi.org/10.1145/3132525.3134821> 
15. Abraham T. Glasser*, Kesavan R. Kushalnagar* & Raja S. Kushalnagar. 2017. *Deaf, Hard of Hearing, and Hearing perspectives on using Automatic Speech Recognition in Conversation*. In 19th International ACM SIGACCESS Conference on Computers and Accessibility – ASSETS '17. Baltimore, MD, USA: ACM Press. <https://doi.org/10.1145/3132525.3134781> 
16. Abraham T. Glasser*, Kesavan R. Kushalnagar* & Raja S. Kushalnagar. 2017. *Feasibility of Using Automatic Speech Recognition with Voices of Deaf and Hard-of-Hearing Individuals*. In 19th International ACM SIGACCESS Conference on Computers and Accessibility – ASSETS '17. Baltimore, MD, USA: ACM Press. <https://doi.org/10.1145/3132525.3134819> 
17. Raja S. Kushalnagar, Gary W. Behm, Shareef S. Ali*, Susie M. Harvey* and Karina Bercan*. 2017. *Enhancing participation of deaf engineering students in lab discussion*. In 124th Annual Conference & Exposition – ASEE 2017. Columbus, OH. ASEE Conferences. <https://peer.asee.org/28278> 
18. Raja S. Kushalnagar, Matthew S. Seita* & Abraham T. Glasser*. 2017. *Closed ASL Interpreting for Online Videos*. In W4A Conference – W4A 2017. Perth, Western Australia, Australia. ACM Press. <http://dx.doi.org/10.1145/3058555.3058578> 
19. James M. Waller* & Raja S. Kushalnagar. 2016. *Evaluation of Automatic Caption Segmentation*. In 18th International ACM SIGACCESS Conference on Computers and Accessibility - ASSETS '16. Reno, NV, USA. ACM Press. <http://doi.org/10.1145/2982142.2982205> 
20. Raja S. Kushalnagar, Poorna Kushalnagar & Fadi Haddad*. 2016. *SingleScreenFocus for Deaf and Hard of Hearing Students*. In Computers Helping 


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22. Raja S. Kushalnagar, Gary W. Behm, Aaron W. Kelstone & Shareef S. Ali*. 2015. Tracked Speech-To-Text Display: Enhancing Accessibility and Readability of Real-Time Speech-To-Text. In 17th International ACM SIGACCESS Conference on Computers & Accessibility - ASSETS '15. Lisbon, Portugal. ACM Press. <http://doi.org/10.1145/2700648.2809843> 


23. Karen J. Beiter & Raja S. Kushalnagar. 2015. *Optimal Classroom Views for Deaf Students*. In Proceedings of the 2015 Rehabilitation Engineering and Assistive Technology Society of North America Conference. Baltimore, MD, USA. <http://doi.org/10.13140/RG.2.2.11885.38886> 


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25. Raja S. Kushalnagar, Gary W. Behm, Joseph S. Stanislow & Vasu Gupta*. 2014. *Enhancing caption accessibility through simultaneous multimodal information*. In 16th international ACM SIGACCESS conference on Computers & accessibility - ASSETS '14. Rochester, New York, USA. ACM Press. <http://doi.org/10.1145/2661334.2661381> 

26. Raja S. Kushalnagar, John J. Rivera*, Warrance Yu* & Daniel S. Steed*. 2014. *AVD-LV: an accessible player for captioned STEM videos*. In 16th international ACM SIGACCESS conference on Computers & Accessibility - ASSETS '14. 22 October, Rochester, New York, USA: ACM Press. <http://doi.org/10.1145/2661334.2661353> 

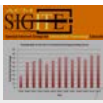
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28. Raja S. Kushalnagar & Poorna Kushalnagar. 2014. *Collaborative Gaze Cues and Replay for Deaf and Hard of Hearing Students*. In Computers Helping People with Special Needs. Paris, France: Springer-Verlag. http://doi.org/10.1007/978-3-319-08599-9_63 

29. Raja S. Kushalnagar, Vignesh Ramachandran* & Tom T. Oh. 2014. *Tactile Captions: Augmenting Visual Captions*. In Computers Helping People with Special Needs. Paris, France. Springer-Verlag. http://doi.org/10.1007/978-3-319-08596-8_5 

30. Walter S. Lasecki*, Raja S. Kushalnagar & Jeffrey P. Bigham. 2014. *Helping students keep up with real-time captions by pausing and highlighting*. In 11th Web for All Conference on - W4A '14. Seoul, South Korea. ACM Press. <http://doi.org/10.1145/2596695.2596701> 

31. Walter S. Lasecki*, Christopher D. Miller*, Raja S. Kushalnagar & Jeffrey P. Bigham. 2013. *Real-time captioning by non-experts with legion scribe*. In Proceedings of the 15th International ACM SIGACCESS Conference on Computers and Accessibility - ASSETS '13. Bellevue, WA, USA: ACM Press. <http://doi.org/10.1145/2513383.2513401> 

32. Raja S. Kushalnagar, David E. Lawrence & Elissa M. Olsen. 2013. *A transition community for deaf and hard of hearing students in information technology programs*. In 13th annual ACM SIGITE conference on Information technology 

education - SIGITE '13. Orlando, FL, USA: ACM Press. <http://doi.org/10.1145/2512276.2512319>

33. Raja S. Kushalnagar, Brian P. Trager, Karen J. Beiter & Noella A. Kolash*. 2013. *American Sign Language: Maximum Live Replay Speed*. In Rehabilitation Engineering and Assistive Technology Society of North America. Seattle, WA. RESNA. <http://doi.org/10.13140/2.1.3841.1208> 

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35. Raja S. Kushalnagar, Walter S. Lasecki* & Jeffrey P. Bigham. 2013. *Captions versus transcripts for online video content*. In 10th International Cross-Disciplinary Conference on Web Accessibility - W4A '13. New York, New York, USA: ACM Press. <http://doi.org/10.1145/2461121.2461142> 

36. Lalit K. Phadtare*, Raja S. Kushalnagar & Nathan D. Cahill. 2012. *Detecting hand-palm orientation and hand shapes for sign language gesture recognition using 3D images*. In IEEE (Ed.), 2012 Western New York Image Processing Workshop. Rochester, NY: IEEE. <http://doi.org/10.1109/WNYIPW.2012.6466652> 

37. Raja S. Kushalnagar, Walter S. Lasecki* & Jeffrey P. Bigham. 2012. *A readability evaluation of real-time crowd captions in the classroom*. In 14th international ACM SIGACCESS conference on Computers and accessibility - ASSETS '12. New York, New York, USA: ACM Press. <http://doi.org/10.1145/2384916.2384930> 

38. Poorna Kushalnagar., Benjamin P. Williams* & Raja S. Kushalnagar. 2012. *Community-Based Participatory Approach: Students as Partners*. In International Conference on Computers Helping People. Berlin, Heidelberg: Springer-Verlag. http://doi.org/10.1007/978-3-642-31522-0_9 

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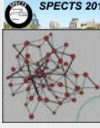


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

43. Raja S. Kushalnagar, Stephanie A. Ludi & Poorna Kushalnagar. 2011. *Multi-view platform: An Accessible Live Classroom Viewing Device*. In 13th international ACM SIGACCESS conference on Computers and accessibility - ASSETS '11. New York, New York, USA: ACM Press. <http://doi.org/10.1145/2049536.2049600> 

44. Raja S. Kushalnagar & Brian P. Trager. 2011. *Improving classroom visual accessibility with cooperative smartphone recordings*. In ACM SIGCAS Computers and Society, 41(2), 51–58. <http://doi.org/10.1145/2095272.2095277> 



45. Raja S. Kushalnagar, Anna C. Cavender* & Jehan-François Pâris. 2010. *Multiple view perspectives: improving inclusiveness and video compression in mainstream classroom recordings*. In ACM SIGACCESS conference on Computers and accessibility - ASSETS '10. New York, New York, USA: ACM Press. <http://doi.org/10.1145/1878803.1878827> 
46. Raja S. Kushalnagar & Jehan-François Pâris. 2010. *Multiple View Scalability of Presentations Distributed to Heterogeneous Devices*. In 2010 International Symposium on Performance Evaluation of Computer and Telecommunication Systems - SPECTS '10. Ottawa, Canada: IEEE. <http://doi.org/10.13140/2.1.3447.9046> 
47. Raja S. Kushalnagar & Jehan-François Pâris. 2010. *Evaluation of a Scalable and Distributed Mobile Device Video Recording Approach for Accessible Presentations*. In 29th International Performance of Computers and Communication Conference IPCCC 2010. Albuquerque, NM: IEEE. <http://doi.org/10.1109/PCCC.2010.5682331> 
48. Raja S. Kushalnagar. 2010. *A comparison of P2P approaches in handling multiple video perspective streams by mobile devices to support a more inclusive learning environment*. In 8th IEEE International Conference on Pervasive Computing and Communications. Mannheim, Germany: IEEE. <http://doi.org/10.1109/PERCOMW.2010.5470563> 







1.e. Media (Films, CDs, DVD's, Photographs, Webpages)

1.e.i. Videos

1. Raja S. Kushalnagar, Poorna Kushalnagar, Youmee Lee* & Stacy Lawrence [Raja Kushalnagar]. 2016. Learning through Deaf Eyes (Short version) [video file]. YouTube. Retrieved from https://youtu.be/e_AdVxQjDh8 
2. Raja S. Kushalnagar, Poorna Kushalnagar, Youmee Lee* & Stacy Lawrence [Raja Kushalnagar]. 2016. Learning through Deaf Eyes (Mid-length version) [video file]. YouTube. Retrieved from <https://youtu.be/E865v-lgSCg> 
3. Raja S. Kushalnagar, Poorna Kushalnagar, Youmee Lee*, Stacy Lawrence [Raja Kushalnagar]. 2016. Learning through Deaf Eyes (Long Version) [video file]. YouTube. Retrieved from https://youtu.be/sYEjM_9o5bs 
4. Raja S. Kushalnagar [Raja Kushalnagar]. 2015. Divided Attention between Slides and Interpreter [video file]. YouTube. Retrieved from <https://youtu.be/Flop3UGoZfk> 
5. Raja S. Kushalnagar [Raja Kushalnagar]. 2014. Eye Gaze Differences: Deaf Versus Hearing [video file]. YouTube. Retrieved from <https://youtu.be/0gg8heGk2II> 







1.e.ii. News

1. Gregory Mone. 2017. *Feeling sounds, hearing sights*. Communications of the ACM, 61(1), 15-17. DOI: <http://doi.org/10.1145/3157075> 
2. Walter S. Lasecki, Christopher D. Miller, Iftexhar Naim, Raja S. Kushalnagar, Adam Sadilek, Daniel Gildea & Jeffrey P. Bigham. 2017. Deep Integration of Human and Machine Intelligence to Caption Speech in Real-Time. Communications of the ACM, 60 (9), 93-100. DOI: <http://doi.org/10.1145/3068663> 

3.	Jonathan Lazar, Elizabeth F. Churchill, Tovi Grossman, Gerrit van der Veer, Philippe Palanque, John Morris & Jennifer Mankoff. 2016. <i>Making the Field of Computing More Inclusive</i> . Communications of the ACM, 60 (3), 50-59. DOI: http://doi.org/10.1145/2993420	
4.	Deaf Unity. 2013. Deaf Unity visits RIT/NTID. Retrieved from http://goo.gl/Zt7ioR	
5.	<i>RIT University News</i> . 2013. Effective Assistive Technology. Rochester, NY. Retrieved from http://youtu.be/22vi51MLhBE	
6.	Goodman, J. 2013. RIT professor works to make technology more accessible. Democrat and Chronicle. Rochester, NY. Retrieved from http://goo.gl/C5b1KZ	
7.	Phys.org. 2012. Crowdsourcing site compiles new sign language for math and science. UW Today. Retrieved from http://goo.gl/hgI2DK	
8.	Qenqua, D. 2012. Pushing Science's Limits in Sign Language Lexicon. New York Times. New York, NY, USA. Retrieved from https://goo.gl/w3rWuv	
















1.f. Exhibits, Performances, Demonstrations & Other Creative Activities.

1.f.i. Demonstrations

1.	Raja S. Kushalnagar & Gary W. Behm. 2016. <i>Tracked Captions</i> . In Imagine RIT Innovation and Creativity Festival. 7 May 2016. Rochester, NY.	
2.	Raja S. Kushalnagar & Karen J. Beiter. 2015. <i>Learning through Deaf Eyes</i> . In Imagine RIT Innovation and Creativity Festival. 2 May 2015. Rochester, NY.	
3.	Raja S. Kushalnagar & Karen J. Beiter. 2014. <i>Accessible Viewing Device: Image Views</i> . In Imagine RIT Innovation and Creativity Festival. 3 May 2014. Rochester, NY.	
4.	Raja S. Kushalnagar, Brian P. Trager & Karen J. Beiter. 2013. <i>Eye Gaze Control Using the Accessible Viewing Device</i> . In Imagine RIT: Innovation and Creativity Festival. 4 May 2013. Rochester, NY.	
5.	Raja S. Kushalnagar & Brian P. Trager. 2012. <i>Multiple Views Program</i> . In Imagine RIT Innovation and Creativity Festival. 5 May 2012. Rochester, NY.	
6.	Raja S. Kushalnagar & Brian P. Trager. 2011. <i>Multiple Views</i> . In Imagine RIT Innovation and Creativity Festival. 7 May 2011. Rochester, NY.	

1.g. Original Designs, Plans, Inventions, Software, and/or Patents.

1.h. Contracts and Grants. List source, title, amount awarded, time-period, and role (e.g., principal investigator). If there are co-investigators, please list these.

#		Grant	Role	Duration	Amount
1		<u>Google exploreCSR</u>	PI – Raja Kushalnagar	2019-2020	\$18,000
2		<u>21st Century Captioning</u> NIDILRR–90DPCP0002	PI – Christian Vogler Co-I – Raja Kushalnagar	2018-2023	\$2,375,000
3		<u>Wearable Sound Sensing</u> NSF–1763219	PI – Raja Kushalnagar PI – Leah Findlater	2018-2022	\$100,000
4		<u>REU AICT Site</u> NSF–1757836	PI – Raja Kushalnagar Co-PI – Christian Vogler	2018-2021	\$402,212
5		<u>MITRE–COE-TRS</u> MITRE–108727	PI – Christian Vogler Co-PI – Raja Kushalnagar	2017-2020	\$323,821
6		<u>REU AMI Site</u> NSF–1460894	PI – Raja Kushalnagar Co-PI – Stephanie Ludi	2015-2018	\$385,433
7		<u>C-Print Attention</u> RIT–31540	Co-PI – Raja Kushalnagar PI – Michael Stinson	2015-2017	\$19,700
8		<u>IP-CTS Assessment</u> MITRE–102871	PI – Raja Kushalnagar Co-PI – Gary Behm	2015-2016	\$14,468
9		<u>Health Text Accessibility</u> RIT–48320	PI – Raja Kushalnagar	2015-2016	\$13,000
10		<u>Real-Time Captioning</u> NSF–1218056	PI – Raja Kushalnagar PI – Jeffrey Bigham	2014-2015	\$129,554
11		<u>PLIG Visual Cues</u> RIT–15861	PI – Raja Kushalnagar	2013-2014	\$5,000
12		<u>Eye Gaze Control</u> RIT–15861	PI – Raja Kushalnagar	2013-2014	\$7,180
13		<u>ASL Avatars</u> RIT–15824	Co-PI – Raja Kushalnagar PI – Nathan Cahill	2012-2013	\$48,395
14		<u>Visual Cues for DHH</u> RIT–15812	PI – Raja Kushalnagar	2012-2013	\$5,000
15		<u>Time Warner – Research</u> <u>TWC 2013</u>	PI – Raja Kushalnagar	2012-2013	\$20,000
16		<u>Microsoft – Phone Grant</u>	PI – Raja Kushalnagar	2011-2013	\$4,000
17		<u>NTID Innovation Grant</u> RIT–48320	PI – Raja Kushalnagar Co-PI – Brian Trager	2011-2013	\$76,922
18		<u>DHH Cyber-Community</u> NSF–0915268	SP – Raja Kushalnagar PI – Richard Ladner	2010-2012	\$69,181
		Total of Grants		2010-2023	\$4,016,866

1.i. Fellowships, Prizes, and Awards.

#	Award	Year
1	<u>RIT Featured Faculty Scholarship</u>	2015
2	<u>NTID Scholarship Award for Pre-Tenure Faculty</u>	2013
3	<u>Gallaudet University Alumni – Graduate Fellowship</u>	2006, 2007

1.j. Editorships, Editorial Boards & Reviewing Activities for Journals and Other Learned Publications.

1.j.i. Editorial Boards

#	Journal	Year
1	TACCESS: ACM Transactions on Accessible Computing	2014-2018

1.j.ii. Peer Reviews

#	Organization	Year
1	TACCESS: ACM Transactions on Accessible Computing	2016-2020
2	CHI: ACM Conference on Human Factors in Computing Systems	2012-2020
3	ASSETS: ACM SIGACCESS Conference on Computers and Accessibility	2011-2019
4	ASEE: American Society for Engineering Education Annual Conference	2011-2019
5	SRC: ACM National Student Research Competition	2012-2016
6	UIST: ACM Symposium on User Interface Software and Technology	2015
7	NIDILRR: National Institutes of Disability and Rehabilitation Research	2013-2014
8	SLTAT: Symposium on Sign Language Translation and Avatar Technology	2013
9	CSCW: ACM Conference on Computer Supported Community Work	2013
10	RESNA: Rehabilitation Engineering Association of North America	2012-2013

1.k. Other (specify type).

2. Teaching, Mentoring, and Advising

2.a. Courses taught in the last five years. Indicate approximate enrollments and any courses with non-traditional formats (e.g. online).

#	Term	Course	Course Name	C	#	SCH
1	2020 Fall	STM 403.02	Senior Capstone	3	14	42
2	2020 Spring	ITS 492.01	Senior Capstone Project II	3	15	45
3	2020 Spring	PSY 395.01	Human Computer Interaction	3	2	6
4	2020 Spring	ITS 371.01	Human Computer Interaction	3	12	36
5	2019 Fall	ITS 361.01	Information Security Fundamentals	3	12	36
6	2019 Fall	ITS 311.01	Intro to Mobile Applications Development	3	12	36
7	2019 Summer	ITS 499.01	Cybersecurity Internship in IT	1	1	1
8	2019 Spring	ITS 371.01	Human Computer Interaction	3	16	48
9	2019 Spring	ITS 492.01	Senior Capstone Project II	3	8	24
10	2018 Fall	ITS 311.01	Intro to Mobile Applications Development	3	10	30
11	2018 Fall	BIO 403.01	Senior Capstone I	3	7	21
12	2018 Fall	ITS 491.01	Senior Capstone Project I	3	8	24
13	2018 Fall	MAT 403.01	Senior Capstone in Mathematics	3	2	6
14	2018 Spring	ITS 492.01	Senior Capstone Project II	3	6	18
15	2018 Spring	ITS 371.01	Human-Computer Interaction	3	12	36
16	2017 Fall	ITS 395.01	Computational Thinking	3	1	3
17	2017 Fall	GSR 230.06	Computational Thinking	3	15	45
18	2017 Fall	ITS 311.01	Intro to Mobile Applications Development	3	8	24
19	2017 Summer	ITS 499.01	Virtual Reality Development	3	1	3
20	2017 Summer	ITS 499.02	Accessible Multimodal Interfaces Research	1	1	1
21	2017 Spring	ITS 495.02	Accessible Computing R & D	3	6	18
22	2017 Spring	ITS 495.01	iOS Application Development	3	7	21
23	2017 Spring	PSY 395.01	Human Computer Interaction	3	1	3
24	2017 Spring	ITS 371.01	Human Computer Interaction	3	7	21
25	2016 Fall	ITS 311.01	Intro to Mobile Applications Development	3	9	27
26	2016 Fall	ITS 495.01	Corporate Information Security	3	9	27
27	2016 Spring	NACA 161	Programming Fundamentals II	3	10	30
28	2015 Fall	NACT 250	Computer and Data Security	3	8	24
29	2015 Fall	NACT 250	Computer and Data Security	3	9	27
30	2015 Spring	NACA 161	Programming Fundamentals II	3	9	27
31	2014 Fall	NACT 250	Computer and Data Security	3	8	24
32	2014 Spring	NACA 160	Programming Fundamentals I	3	11	33
33	2013 Fall	NACT 250	Computer and Data Security	3	7	21
34	2012 Winter	0805 353	Introduction to Computer Forensics	3	9	27
35	2012 Spring	0805 390	Programming Fundamentals	3	7	21
36	2011 Winter	0805 353	Introduction to Computer Forensics	3	8	24
37	2011 Fall	0805 390	Programming Fundamentals	3	7	21
38	2011 Spring	0805 390	Programming Fundamentals	3	8	24
39	2010 Fall	0805 390	Programming Fundamentals	3	6	18
2010-2019			Total Student Enrollment and Credit Hours		309	923

2.b. Course or Curriculum Development.

#	Course	Title	Year
1	ITS 499.01	Cybersecurity Internship in IT	Summer 2019
2	STM 403.01	Senior Capstone Project	Fall 2018
3	ITS 492.01	Senior Capstone Project II	Spring 2018
4	GSR 230.06	Computational Thinking	Fall 2017
5	ITS 499.01	Virtual Reality Development	Summer 2017
6	ITS 499.02	Accessible Multimedia Interface Research	Summer 2017
7	ITS 495.02	Accessible Computing R & D	Spring 2017
8	ITS 495.01	iOS Application Development	Spring 2017
9	ITS 371.01	Human-Computer Interaction	Fall 2017
10	ITS 311.01	Intro to Mobile Application Development	Fall 2016
11	NACA-162	Programming Fundamentals II, C++	Fall 2013
12	NACA-161	Programming Fundamentals I	Spring 2012
13	NACT-250	Computer and Data Security	Spring 2012
14	0805-353	Computer Forensics	Fall 2011

2.c. Manuals, Notes, Software, Webpages & Other Contributions to Teaching.

2.d. Teaching Awards & Other Special Recognition.

1. Heavy Hitters Award for Most Active Course (Top 1%) Spring 2014

2.e. Advising (other than research direction): Indicate approximate numbers of students per year.

2.e.i. Undergraduate.

#	Academic Year	#
1	2020-21	10
2	2019-20	14
3	2018-19	14
4	2017-18	7
5	2016-17	5
2016-19 – Students Advised		22

2.e.ii. Graduate.

2.e.iii. Other advising & mentoring activities (advising student groups, special assignments, recruiting, faculty mentorship, etc.)

Organization	Semesters
Bison Information Technology Club	2018 Fall, 2019 Spring

2.f. Advising: Research Direction. The name of student and academic year(s) involved should be indicated, as well as placement of the student(s). List completed work first and then in-progress work.

Student	Advising Responsibility	Duration
Patricia Schmidt	1 st reader, Honors Capstone	2020 Spring
Bailey Moers	3 rd reader, Honors Capstone	2019 Spring
Sean Fenton	2 nd reader, Honors Capstone	2017 Spring
Sean Fenton	Instructor, Honors Course Paper– ITS 311	2017 Spring

2.f.i. Undergraduate.

Supervised Research Advising and Mentoring

#	Student & Current Position	Duration
1	Samantha Kringsman, Gallaudet University	2020 Summer
2	Joseph Mendis, Gallaudet University	2020 Summer
3	Linnea Munro, McGill University	2020 Summer
4	Emelia Beldon, Gallaudet University	2020 Summer
5	Michael Tota, Gallaudet University	2020 Summer
6	Amit Balchandani, BS, Gallaudet University.	2019 Summer
7	Carrie Bergstedt, BS, University of North Carolina, Asheville.	2019 Summer
8	Chang Jun-Hwang, BS, Gallaudet University.	2019 Summer
9	Chloe Keilers, BS, Stanford University.	2019 Summer
10	Christina Mai, University of Texas at Dallas.	2019 Summer
11	Colleen Gilmore, Valencia Community College.	2019 Summer
12	Corey Rosko, BS, Gallaudet University.	2019 Summer
13	Edward Riley, BS, Rochester Institute of Technology.	2019 Summer
14	Gabriella Wojtanowski, BS, Gallaudet University.	2019 Summer
15	Joseline Garcia, BS, Gallaudet University.	2019 Summer
16	Kaitlyn Weeks, BS, Gallaudet University.	2019 Summer
17	Kirsten Fargas, MA, Gallaudet University.	2019 Summer
18	Promiti Datta, BS, University of Toronto.	2019 Summer
19	Rachel Belle Robinson, Louisiana Tech.	2019 Summer
20	Pablo Jakubowicz, BS, Gallaudet University.	2019 Summer
21	Athena Willis, BA, Gallaudet University. PhD, Gallaudet University.	2018 Summer
22	Becca Dingman, BS, RIT. MS RIT.	2018 Summer
23	Brittany Willis, BS, Gallaudet University.	2018 Summer
24	Eli Litwack, BS, University of Maryland.	2018 Summer
25	Elizabeth Codick, BS, RIT.	2018 Summer
26	Evan Gambill, BS, Mercer University.	2018 Summer
27	Jacob Rhoades, BS, RIT.	2018 Summer
28	Jason Rodolitz, BS, Pomona College.	2018 Summer
29	Landrie Tchakuoa, BS, Jackson State University.	2018 Summer
30	Andrew Biskupiak, MS, Gallaudet University.	2018 Summer
31	Jason Antal, BA, Gallaudet University. MSSD.	2017 Summer
32	Jaron Rehkop, BS, Gallaudet University. Convo, Inc.	2017 Summer
33	Thomas Mulally, BS, Gallaudet University. Purple, Inc.	2017 Summer
34	Benjamin Kassman, BS, Western Oregon University.	2017 Summer
35	Kesavan Kushalnagar, BS, RIT. Carbon 3D, Inc.	2017 Summer
36	Alexandra LeClerc, BS, Western Oregon University.	2017 Summer
37	Grace McPherson, BS, UT Chattanooga. Company Lab Inc, Chattanooga.	2017 Summer

38	Shareef Ali, BS, RIT.	2017 Summer
39	Kevin Wolfe, BS, Gallaudet University Microsoft, Inc.	2017 Summer
40	Catherine Seita, BS, Cornell University.	2017 Summer
41	Abigail Spring, BS, RIT. Deceased	2016 Summer
42	Abraham Glasser, BS, RIT PhD Student, RIT.	2016 Summer
43	Brenda Castro, BS, Harvey Mudd College PhD Student, Cornell Tech.	2016 Summer
44	Claire Ryan, BS, RIT PhD Student, University of Texas.	2016 Summer
45	Daniel Saavedra, BS, RIT Convo, Inc Austin, TX.	2016 Summer
46	Joan Malasig, BS, Rutgers University.	2016 Summer
47	Karina Bercan, BS, Simmons U Wellington Management, Boston, MA.	2016 Summer
48	Kayla Vodacek, BS, RIT PhD Student, U of California at Davis.	2016 Summer
49	Kevin Rathbun, BS, University at Buffalo. Knewton Inc, NYC.	2016 Summer
50	Paul Bayruns, BS, Rowan University. fitDegree, Inc, Sewell, NJ.	2016 Summer
51	Peter Yeung, BS, MS, RIT. National Geospatial Agency, VA.	2016 Summer
52	Pierre Price, AS, Madison Community College.	2016 Summer
53	Susie Harvey, BS, Gallaudet University.	2016 Summer
54	Tiandre Turner, BS, MS, RIT. NTID ICS Instructor.	2016 Summer
55	Jenna Tart, BS, UMBC.	2015 Summer
56	Mary Rose Weber, BS, RIT Target Stores Inc, Minneapolis, MN.	2015 Summer
57	Matthew Seita, BS, RIT PhD Student, RIT.	2015 Summer
58	Benjamin Polstra, BS, RIT IT Department, Geico Inc.	2015 Summer
59	Fadi Haddad, BS, Gallaudet University. GTS, Gallaudet University.	2015 Summer
60	James Waller, BS, Pomona College. PhD Student, U of Chicago	2015 Summer
61	Jamie Simpson, BS, U of North Texas. App Developer, UNT.	2015 Summer
62	Victor Ortiz, AS, Monroe Community College.	2015 Summer
63	Wilmot Merchant, BS, Coastal Carolina University. Quilmont Solutions	2015 Summer
64	Eric Epstein, BS, RIT PhD Student, RIT.	2015 Summer
65	Allison Porter, BS, RIT. Metro Deaf School, St Paul, MN	2014 Summer
66	Daniel Steed, BS, RIT Sorenson. Rochester, NY	2014 Summer
67	Vasu Gupta, BS, MS, RIT. MS Student, RIT	2014 Summer
68	John Rivera, BS, RIT. MS Student, SUNY At Buffalo	2014 Summer
69	Warrance Yu, BS, RIT.	2014 Summer
70	Wander Bravo, MS, RIT. Shippify, Miami, FL	2014 Spring
71	Samuel Georgeo, BS, RIT.	2014 Spring
72	Vignesh Ramachandran, MS, RIT Synopsis, Bloomington, IN	2013 Fall
73	Joseph Vigilante, BS, RIT.	2013 Fall
74	Emily Werfel, BS, RIT.	2013 Fall
75	Yue Ding, MS, RIT. St Rita's School for the Deaf, Cincinnati, OH	2013 Fall
76	Youmee Lee, BS, RIT. UX Designer, AT&T, Atlanta, GA	2013 Spring
77	Mary Alummoottil, BS, RIT.	2013 Spring
78	Bradley Frank, BS, RIT. IT Dept, Dow Chemicals, Lansing, MI	2013 Spring
79	Perna Keshari, MS, RIT. Software Developer, Matlab, Boston, MA	2012-2013
80	Michelle Chung, BS, RIT. Hawaii School f/t Deaf, Honolulu, HI	2012-2013
81	Raghu Puppala, MS, RIT. KLA-Tencor, San Francisco, CA	2012-2013
82	Melvin Wingfield, BS, RIT. Ski Lift Technician, Vail, CO	2012-2013
83	Kristin Parker, BS, RIT. Newport Laboratories, Sioux Falls, SD	2012-2013
84	Noella Kolash, BS, RIT. PhD Student, RIT	2012-2013
85	Lalit Phadtare, MS, RIT. MathWorks, Boston, MA	2012-2013
86	Sai Krishna Mulpuru, MS, RIT. Srishti Institute of ADT Bengaluru, India	2011-2012
87	Joel Skelton, BS, RIT. Asst Office Manager, PAHrtners, Glenside, PA	2011-2012
88	Joseph Dalpra, BS, RIT. Sr Technician, Purple Inc, CA	2011-2012

89	Rachel Yerian, BS, RIT. UPS, Rochester, NY	2011-2012
90	Moges Gembero, BS, RIT. Biologist, NIDKK, NIH, Phoenix, AZ	2010-2011
91	Tri Ngo, MS, RIT. Network Admin, Google, Mountain View, CA	2010-2011

2.f.ii. Master's

#	Student, Program	Role	Year
1	John Costanzo, Rochester Inst Of Technology, MS Thesis Committee	Member	Spring 2013

2.f.iii. Doctoral

#	Student, Program	Role	Year
1	Larwan Berke, Rochester Institute of Technology, PhD Committee	Member	2016-2020
2	Noella Kolash, Rochester Institute of Technology, PhD Committee	Advisor	2015-2016

2.g. Extension Activities. Major programs established, workshops, presentations, media activities, awards, honors, etc., should be indicated.

#	Program	Role	Year
1	Gallaudet Google IT/CS Mentoring Workshop	Organizer	2020
2	Gallaudet 3 rd IT Summit w/ Career Center	Co-Organizer	2020
3	Gallaudet 2 nd IT Summit w/ Career Center	Co-Organizer	2019
4	Texas School f/t Deaf – Discovery Retreat for HS Students	Representative	2019
5	Gallaudet 1 st IT Summit w/ Career Center	Co-Organizer	2018
6	Microsoft GitHub Education Program at Gallaudet University	Coordinator	2018-Present
7	Microsoft Imagine Premium Program at Gallaudet University	Coordinator	2017-Present
8	VMWare Academic Program at Gallaudet University	Coordinator	2017-Present

3. Service

3.a. Professional.

3.a.i. Offices and committee memberships held in professional organizations.

#	Committee/Event	Role	Year
1	ACM ASSETS '20 – Athens, Greece	SRC Competition Chair	2019-20
2	ACM ASSETS '19 – Pittsburgh, PA	Accessibility Co-Chair	2018-19
3	ACM ASSETS '18 – Galway, Ireland	Accessibility Co-Chair	2017-18
4	ACM ASSETS '17 – Baltimore, MD	Treasurer & Registration Chair	2016-17
5	ACM ASSETS '16 – Reno, NV	Accessibility Chair	2015-16
6	ACM ASSETS '15 – Lisbon, Portugal	Caption Challenge Chair	2014-15
7	ACM ASSETS '15 – Lisbon, Portugal	Accessibility Chair	2014-15
8	ACM ASSETS '14 – Rochester, NY	Captioning Challenge Chair	2013-14
9	ACM ASSETS '14 – Rochester, NY	Accessibility Chair	2013-14
10	ACM Symposium on Sign Language Translation and Avatars '13 – Chicago, IL	Member	2013-14
11	ACM ASSETS '13 – Bellevue, WA	Accessibility Chair	2012-13
12	ACM ASSETS '12 – Boulder, CO	Accessibility Chair	2011-12

3.a.ii. Reviewing activities for agencies.

3.a.iii. Other unpaid services to local, state, and federal agencies.

3.a.iv. Other non-University committees, commissions, panels, etc.

#	Committee/Event	Role	Year
1	Global Alliance of Speech-to-Text Captioning	Board of Directors - Member	
2	Computing Research Association Widening Participation (CRA-WP)	Board of Directors - Member	2019-22
3	Association of Computing Machinery Computer-Human Interaction (CHI)	Steering Committee - Member	2019-21
4	Teach Access	Representative	2019-20
5	Federal Communications Commission – Disability Advisory Committee (DAC)	Alternate Member	2018-20
6	New York School for the Deaf - Fanwood	Board of Trustees - Member	2017-21
7	Benetech DIAGRAM Advisory Committee	Member	2016-19
8	Federal Communications Commission – Consumer Advisory Committee (CAC)	Member	2011-14
9	Deaf Rochester Film Festival (DRFF)	Technical Director	2011

3.b. Campus.

3.b.i. Departmental.

#	Committee/Event	Role	Year(s)
1	IT US Secret Service Tour	Organizer	Fall 2019
2	STM National Geospatial Agency Tour	Organizer	Fall 2018
3	Bison Innovation and Technology Club (BIT)	Advisor	2017-18
4	STM Biology Faculty Search Committee	Member	2017-18
5	STM IT Faculty Search Committee	Chair	2017-18
6	STM Open House Committee	Representative	2017-18
7	IT Program Evaluation – CM, UEP, LAU	Evaluator	2017-18
8	IT Program Classroom and Equipment Renovation Committee	Coordinator	2017-18
9	Gallaudet Open House Fair	Representative	2017-18
10	STM National Geospatial Agency Tour	Organizer	2016
11	STM Open House Committee for freshman and transfer students	Member	2016-17
12	IT Program Evaluation – CM, UEP, LAU	Evaluator	2016-17
13	IT Program Classroom and Equipment Renovation Committee	Coordinator	2016-17
14	IT Program at Gallaudet Open House Fair	Representative	2016-17
15	ICS Department – Mobile Application Design Major	Member	2014-15
16	ICS Department – Game Design Development Concentration	Member	2013-14
17	ICS Department Faculty Search – Two Lecturer Positions	Member	2011-12

3.b.ii. College.

3.b.iii. University.

#	Committee/Event	Role	Year(s)
1	Communication Studies Faculty Search Committee – COM PTT/TT	Member	2020
2	Office of Sponsored Programs, Staff Search Committee – Coordinator	Member	2019
3	Title IX Panel – 4 cases	Panelist	2019
4	STM Department, Faculty Search Committee – IT/MAT NTT	Chair	2019
5	STM Department, Faculty Search Committee – IT TT	Chair	2019
6	Gallaudet RRT Software Purchase Policy Committee	Member	2018
7	Gallaudet Director of Digital Learning Interview Committee	Member	2018
8	Business Department, Faculty Search Committee – Business Admin	Member	2017
9	Business Department, Faculty Search Committee – Accounting	Member	2017
10	General Studies Self-Study Committee	Member	2017
11	Faculty Learning Community	Member	2016-17
12	Gallaudet Sandbox Ad-Hoc Committee	Member	2016-17
13	Grants Management Request for Proposals Review Committee	Member	2016
14	RIT Academic Senate	Senator	2013-16
15	RIT On-Time-Graduation Committee	Member	2015-16
16	NTID Associate Dean for Research Search Committee	Member	2015-16
17	NTID Faculty Council – NFC	Co-Chair	2015-16
18	NTID Faculty Council – NFC	Member	2012-15
19	NTID Faculty Teaching and Scholarship Award Committee	Member	2011-13
20	NTID Learning Consortium Committee	Member	2011-13

3.b.iv. Special administrative assignments.

3.b.v. Other.

#	Graduate Research Fellowship Program Advising (* Successful GRFP Award)	Year
1	Athena Willis – Application Advising & Recommendation Letter	2019
2	Brenda Castro – Application Advising & Recommendation Letter	2018
3	Eric Epstein – Application Advising & Recommendation Letter	2018
4	Alex LeClerc – Application Advising & Recommendation Letter	2018
5	Larwan Berke* – Application Advising & Recommendation Letter	2017
6	Matthew Seita* – Application Advising & Recommendation Letter	2017
7	Kayla Vodacek – Application Advising & Recommendation Letter	2017
8	Abraham Glasser – Application Advising & Recommendation Letter	2017
9	James Waller* – Application Advising & Recommendation Letter	2016

#	Organization	Role	Year(s)
1	Google Faculty Institute – Cloud Computing	Participant	June 2018
2	Gallaudet – Google Site Visit	Participant	May 2018
3	NSF Broadening Participation in Computing Network	Participant	April 2018
4	NSF Broadening Participation in Computing Accessibility	Participant	April 2018

3.c. Community, State, National.

3.d. Service Awards and Honors.

Notarization. I have read the above following and certify that this curriculum vita is a current and accurate statement of my professional record.

Signature  _____ Date 02/09/2020 _____