

Department of Informatics
School of Information and Computer Science
University of California, Irvine
ampiper@uci.edu
<https://www.ics.uci.edu/~ampiper/>

Education

- Ph.D., Cognitive Science** 2011
Committee: James D. Hollan (chair), Charles Goodwin, William Griswold, Edwin Hutchins, Terry Jernigan, Carol Padden
Department of Cognitive Science
University of California, San Diego
Title: “*Augmenting Collocated Interaction: The Design of Assistive Technology to Support Face-to-Face Communication*”
- M.A., Education** 2005
School of Education
Stanford University
- B.S., Computer Science** 2004
College of Computing
Georgia Institute of Technology

Appointments

- University of California, Irvine
Associate Professor 2020 - present
Department of Informatics
School of Information and Computer Science
- Northwestern University
Associate Professor 2018 - 2020
Department of Communication Studies
School of Communication
Department of Computer Science
by courtesy, McCormick School of Engineering and Applied Sciences
Department of Communication Sciences and Disorders
by courtesy, School of Communication
- AT&T Research Professor 2019 - 2020
- Assistant Professor* 2012 - 2018
Department of Communication Studies
School of Communication
Department of Electrical Engineering & Computer Science 2012 - 2018
by courtesy, McCormick School of Engineering and Applied Sciences
Department of Communication Sciences and Disorders 2014 - 2018

by courtesy, School of Communication

University of California, San Diego
Lecturer
Department of Cognitive Science

2011 - 2012

Publications

Journal Articles

- [J.12] Hunsaker, A., Hargittai, E., and Piper, A.M. (in press). Online Social Connectedness and Anxiety among Older Adults. *International Journal of Communication*.
- [J.11] Hightower, B., Lovato, S., Davison, J., Wartella, E., and Piper, A.M. (2019). Haptic explorers: Supporting science journaling through mobile haptic feedback displays. *International Journal of Human-Computer Studies*, vol. 122, 103-112.
- [J.10] Lovato, S., and Piper, A.M. (2019). Young Children and Voice Search: What We Know From Human-Computer Interaction Research. *Frontiers in Psychology*, 10.
- [J.9] Hargittai, E., Piper, A.M., and Morris, M.R. (2018). From Internet Access to Internet Skills: Digital Inequality among Older Adults. *Universal Access in the Information Society*, 18, 881-890.
- [J.8] Piper, A.M., Brewer, R., and Cornejo, R. (2016). Technology use among older adults with vision impairments: Understanding practices and challenges. *Universal Access in the Information Society*, 1-13.
- [J.7] Brewer, R., Cornejo, R., Schwaba, T., Gergle, D., and Piper, A.M. (2016). Exploring Traditional Phones as an E-Mail Interface for Older Adults. *ACM Transactions on Accessible Computing*, 8(2).
- [J.6] Piper, A.M., Cornejo, R., and Brewer, R. (2016). Understanding the Challenges and Opportunities of Smart Mobile Devices among the Oldest Old. *International Journal of Mobile Human-Computer Interaction*, 8(2).
- [J.5] Piper, A.M., Weibel, N., and Hollan, J. (2014). Designing Audio-Enhanced Paper Photos for Older Adult Emotional Wellbeing in Communication Therapy. *International Journal of Human-Computer Studies*, 72(8-9), 629-639.
- [J.4] Piper, A.M., Friedman, W., and Hollan, J. (2012). Setting the stage for embodied activity: Small group discussion around a multitouch tabletop display. *International Journal of Learning Technology*, 7(1), 58-78, May 2012.
- [J.3] Piper, A.M., Weibel, N., and Hollan, J. (2011). Write-N-Speak: Authoring Multimodal Digital-Paper Materials for Speech-Language Therapy. *ACM Transactions on Accessible Computing (TACCESS)*, 4(1), Nov 2011.

- [J.2] Piper, A.M. and Hollan, J. (2011). Supporting Medical Communication for Older Patients with a Shared Touch-Screen Computer. *International Journal of Medical Informatics*, 82(11), 242–250.
- [J.1] Morris, M.R., Piper, A.M., Cassanego, A., Huang, A., Paepcke, A., and Winograd, T. (2006). Mediating Group Dynamics through Tabletop Interface Design. *IEEE Computer Graphics and Applications*, Sept/Oct 2006, 65-73.

Refereed Papers in Archival Conference Proceedings

- [C.40] Das, M., Borgos-Rodriguez, K., and Piper, A.M. (2020). Weaving by Touch: A Case Analysis of Accessible Making. *Proceedings of ACM Conference on Human Factors in Computing Systems (CHI 2020)*.
[Best Paper Honorable Mention Award (top 5% of papers)]
- [C.39] Harrington, C., Erete, S., and Piper, A.M. (2019). Deconstructing Community-Based Collaborative Design: Towards More Equitable Participatory Design Engagements. *Proceedings of ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW 2019)*.
[Best Paper Award (top 1% of papers)]
- [C.38] Das, M., Gergle, D., and Piper, A.M. (2019). “It doesn’t win you friends”: Understanding Accessibility in Collaborative Writing for People with Vision Impairments. *Proceedings of ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW 2019)*.
[Best Paper Honorable Mention Award (top 5% of papers)]
- [C.37] Borgos-Rodriguez, K., Ringland, K., and Piper, A.M. (2019). MyAutosomeFamilyLife: Analyzing Parents of Children with Developmental Disabilities on YouTube. *Proceedings of ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW 2019)*.
- [C.36] Lovato, S., Piper, A.M., and Wartella, E. (2019). “Hey Google, Do Unicorns Exist?”: Conversational Agents as a Path to Answers to Children’s Questions. *Proceedings of ACM Conference on Interaction Design and Children (IDC 2019)*.
- [C.35] Beheshti, E., Borgos-Rodriguez, K., and Piper, A.M. (2019). Supporting Parent-Child Collaborative Learning through Haptic Feedback Displays. *Proceedings of ACM Conference on Interaction Design and Children (IDC 2019)*.
- [C.34] Feuston, J.L. and Piper, A.M. (2019). Everyday Experiences: Small Stories and Mental Illness on Instagram. *Proceedings of ACM Conference on Human Factors in Computing Systems (CHI 2019)*.
[Best Paper Honorable Mention Award (top 5% of papers)]
- [C.33] Harrington, C., Borgos-Rodriguez, K., and Piper, A.M. (2019). Engaging Low-Income African American Older Adults in Health Discussions through Community-based Participatory Design Workshops. *Proceedings of ACM Conference on Human Factors in Computing Systems (CHI 2019)*.

- [C.32] Feuston, J. and Piper, A.M. (2018). Beyond the Coded Gaze: Analyzing Expression of Mental Health and Illness on Instagram. *Proceedings of ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW 2018)*.
[acceptance rate: 26%]
- [C.31] Wang, E.Q., and Piper, A.M. (2018). Accessibility in Action: Co-Located Collaboration among Deaf and Hearing Professionals. *Proceedings of ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW 2018)*.
[acceptance rate: 26%]
- [C.30] Lazar, A., Feuston, J.L., Edasis, C., and Piper, A.M. (2018). Making as Expression: Informing Design with People with Complex Communication Needs through Art Therapy. *Proceedings of ACM Conference on Human Factors in Computing Systems (CHI 2018)*.
[Best Paper Award (top 1% of papers)]
- [C.29] Diaz, M., Johnson, I., Lazar, A., Piper, A.M., and Gergle, D. (2018). Addressing Age-Related Bias in Sentiment Analysis. *Proceedings of ACM Conference on Human Factors in Computing Systems (CHI 2018)*.
[Best Paper Award (top 1% of papers)]
- [C.28] Brewer, R., and Piper, A.M. (2018). xPress: Rethinking Design for Aging and Accessibility through a Voice-Based Online Blogging System. *Proceedings of ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW 2018)*.
- [C.27] Lazar, A., Edasis, C., and Piper, A.M. (2017). A Critical Lens on Dementia and Design in HCI. *Proceedings of ACM Conference on Human Factors in Computing Systems (CHI 2017)*, 2175-2188.
[acceptance rate: 25%]
[Best Paper Award (top 1% of papers)]
- [C.26] Lazar, A., Edasis, C., and Piper, A.M. (2017). Supporting People with Dementia in Digital Social Sharing. *Proceedings of ACM Conference on Human Factors in Computing Systems (CHI 2017)*, 2149-2162.
[acceptance rate: 25%]
[Best Paper Honorable Mention Award (top 5% of papers)]
- [C.25] Feuston, J., and Piper, A.M. (2017). The Social Lives of Individuals with Traumatic Brain Injury. *Proceedings of ACM Conference on Human Factors in Computing Systems (CHI 2017)*, 182-194.
[acceptance rate: 25%]
- [C.24] Lazar, A., Diaz, M., Brewer, R., Kim, C., and Piper, A.M. (2017). Going Gray, Failure to Hire, and the Ick Factor: Analyzing How Older Bloggers Talk about Ageism. *Proceedings of ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW 2017)*, 655-668.
[acceptance rate: 34%]

[Best Paper Honorable Mention Award (top 5% of papers)]

- [C.23] Cingel, D. and Piper, A.M. (2017). How Parents Engage Children in Tablet-Based Reading Experiences: An Exploration of Haptic Feedback. *Proceedings of ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW 2017)*, 505-510.
[acceptance rate: 34%]

[Best Paper Honorable Mention Award (top 5% of papers)]

- [C.22] Lazar, A., Cornejo, R., Edasis, C., and Piper, A.M. (2016). Designing for the Third Hand: Empowering Older Adults with Cognitive Impairments through Creating and Sharing. *Proceedings of the ACM Conference on Designing Interactive Systems (DIS 2016)*, 1047-1058.
[acceptance rate: 26%]

[Best Paper Award (top 1% of papers)]

- [C.21] Lazar, A., Thompson, H.J., Piper, A.M., and Demiris, G. (2016). Rethinking the Design of Robotic Pets for Older Adults. *Proceedings of the ACM Conference on Designing Interactive Systems (DIS 2016)*, 1034-1046.
[acceptance rate: 26%]

- [C.20] Piper, A.M., Cornejo, R., Hurwitz, L., and Unumb, C. (2016). Technological Caregiving: Supporting Online Activity for Adults with Cognitive Impairments. *Proceedings of ACM Conference on Human Factors in Computing Systems (CHI 2016)*, 5311-5323.
[acceptance rate: 23%]

[Best Paper Honorable Mention Award (top 5% of papers)]

- [C.19] Brewer, R., and Piper, A.M. (2016). “Tell It Like It Really Is”: A Case of Online Content Creation and Sharing Among Older Adult Bloggers. *Proceedings of ACM Conference on Human Factors in Computing Systems (CHI 2016)*, 5529-5542.
[acceptance rate: 23%]

- [C.18] Brewer, R., Morris, M.R., and Piper, A.M. (2016). “Why would anybody do this?” Older Adults’ Understanding of and Experiences with Crowd Work. *Proceedings of ACM Conference on Human Factors in Computing Systems (CHI 2016)*, 2246-2257.
[acceptance rate: 23%]

- [C.17] Cornejo, R., Brewer, R., Edasis, C., and Piper, A.M. (2016). Vulnerability, Sharing, and Privacy: Analyzing Art Therapy among Older Adults with Dementia. *Proceedings of ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW 2016)*, 1572-1583.
[acceptance rate: 25%]

- [C.16] Cingel, D.P., Blackwell, C.K., Connell, S., and Piper, A.M. (2015). Augmenting Children’s Tablet-Based Reading Experiences with Variable Friction Haptic Feedback. *Proceedings of ACM Conference on Interaction Design and Children (IDC 2015)*, 295-298.
[Short Paper]

- [C.15] Lovato, S., and Piper, A.M. (2015). “Siri, is this you?”: Understanding Young Children’s Interactions with Voice Input Systems. *Proceedings of ACM Conference on Interaction Design and Children (IDC 2015)*, 335-338.
[Short Paper]
- [C.14] Twyman, M., Mullenbach, J., Shultz, C., Colgate, J.E., and Piper, A.M. (2015). Designing Wearable Haptic Information Displays for People with Vision Impairments. *Proceedings of the International Conference on Tangible, Embedded and Embodied Interaction (TEI 2015)*, 341-344.
[Short Paper]
- [C.13] Mullenbach, J., Shultz, C., Colgate, J.E., and Piper, A.M. (2014). Exploring Affective Communication Through Variable-Friction Surface Haptics. *Proceedings of ACM Conference on Human Factors in Computing Systems (CHI 2014)*, 3963-3972.
[acceptance rate: 23%]
[Best Paper Honorable Mention Award (top 5% of papers)]
- [C.12] Hope, A., Schwaba, T., and Piper, A.M. (2014). Understanding Digital and Material Social Communications for Older Adults. *Proceedings of ACM Conference on Human Factors in Computing Systems (CHI 2014)*, 3903-3912.
[acceptance rate: 23%]
- [C.11] Piper, A.M., Weibel, N., and Hollan, J. (2013). Audio-Enhanced Paper Photos: Encouraging Social Interaction at Age 105. *Proceedings of ACM Conference on Computer-Supported Cooperative Work (CSCW 2013)*, 215-224.
[acceptance rate: 26%]
- [C.10] Piper, A.M., D’Angelo, S., and Hollan, J. (2013). Going Digital: Understanding Paper and Photo Documentation Practices in Early Childhood Education. *Proceedings of ACM Conference on Computer-Supported Cooperative Work (CSCW 2013)*, 1319-1328.
[acceptance rate: 26%]
- [C.9] Connell, S., Kuo, P., Liu, L., and Piper, A.M. (2013). A Wizard-of-Oz Elicitation Study Examining Child-Defined Gestures With a Whole-Body Interface. *Proceedings of ACM Conference on Interaction Design and Children (IDC 2013)*, 277-280.
[Short Paper]
- [C.8] Hong, M., Piper, A.M., Weibel, N., Olberding, S., and Hollan, J. (2012). Microanalysis of Active Reading Behavior to Inform Design of Interactive Desktop Workspaces. *Proceedings of ACM Conference on Interactive Tabletops and Surfaces (ITS 2012)*, 215-224.
[acceptance rate: 29%]
- [C.7] Piper, A.M., Weibel, N., and Hollan, J. (2012). TAP & PLAY: An End-User Toolkit for Authoring Interactive Pen and Paper Language Activities. *Proceedings of ACM Conference on Human Factors in Computing Systems (CHI*

2012), 149-158.
[acceptance rate: 23%]

- [C.6] Piper, A.M., Weibel, N., and Hollan, J. (2010). Introducing Multimodal Paper-Digital Interfaces for Speech-Language Therapy. *Proceedings of ACM Conference on Computers and Accessibility (ASSETS 2010)*, 203-210.
[acceptance rate: 31%]
[Best Student Paper Award]
- [C.5] Piper, A.M., Campbell, R., and Hollan, J. (2010). Exploring the Accessibility and Appeal of Surface Computing for Older Adult Health Care Support. *Proceedings of ACM Conference on Human Factors in Computing Systems (CHI 2010)*, 907-916.
[acceptance rate: 22%]
- [C.4] Piper, A.M. and Hollan, J. (2009). Analyzing Multimodal Communication around a Shared Tabletop Display. *Proceedings of European Conference on Computer-Supported Cooperative Work (ECSCW 2009)*, 283-302.
[acceptance rate: 21%]
- [C.3] Piper, A.M. and Hollan, J. (2009). Tabletop Displays for Small Group Study: Affordances of Paper and Digital Materials. *Proceedings of ACM Conference on Human Factors in Computing Systems (CHI 2009)*, 1227-1236.
[acceptance rate: 25%]
- [C.2] Piper, A.M. and Hollan, J. (2008). Supporting Medical Conversations between Deaf and Hearing Individuals with Tabletop Displays. *Proceedings of ACM Computer-Supported Cooperative Work (CSCW 2008)*, 147-156.
[acceptance rate: 23%]
- [C.1] Piper, A.M., O'Brien, E., Morris, M.R., and Winograd, T. (2006). SIDES: A Cooperative Tabletop Computer Game for Social Skills Development. *Proceedings of ACM Computer-Supported Cooperative Work (CSCW 2006)*, 1-10.
[acceptance rate: 20%]

Conference Extended Abstracts, Posters, and Demos

- [c.19] Pila, S., Lauricella, A. R., Piper, A. M., & Wartella, E. A. (2020). Teacher Attitudes Towards STEM Learning Using Haptic Feedback Tablets in Early Childhood Education. *Paper presented at the 2020 conference for the International Communication Association (ICA)*, Gold Coast, Australia.
- [c.18] Hargittai, E., Hunsaker, A., and Piper, A.M. (2019). Internet Use and Mental Health among Older Adults. *Paper presented at the 2019 conference for the International Communication Association (ICA)*.
- [c.17] Obiorah, M., Piper, A.M., and Horn, M. (2017). Independent Word Discovery for People with Aphasia. *Extended Abstracts of the ACM Conference on Computers and Accessibility (ASSETS 2017)*.

- [c.16] Brewer, R., Cartwright, M., Karp, A., Pardo, B., and Piper, A.M. (2016). An Approach to Audio-Only Editing for Visually Impaired Seniors. *Ext. Abstracts of the ACM Conference on Computers and Accessibility (ASSETS 2016)*.
- [c.15] Cingel, D.P. and Piper, A.M. (2016). Examining the role of haptic feedback in parent-child joint reading experiences. *Paper presented at the 66th annual conference of the International Communication Association (ICA)*.
- [c.14] Cingel, D.P., Piper, A.M., Connell, S., and Blackwell, C.K. (2015). Developmental differences in young children's uses of and responses to haptic tablet computers. *Paper presented at the 37th biennial meeting of the Society for Research in Child Development 2015, Philadelphia, PA*.
- [c.13] Hargittai, E., Morris, M.R., and Piper, A.M. (2015). Understanding Differentiated Internet Skills among the Elderly. *Abstract presented at the General Online Research (GOR 2015) Conference*.
- [c.12] Jin, S., Mullenbach, J., Shultz, C., Colgate, J.E., Piper, A.M. (2014). OS-Level Surface Haptics for Touch-Screen Accessibility. *Extended Abstracts of the ACM Conference on Computers and Accessibility (ASSETS 2014)*, 315-316.
- [c.11] Brewer, R., Gellner, M., and Piper, A.M. (2014). Portrait Pigeon: An Interactive Photo Messaging Wall for Seniors. *Extended Abstracts of the ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp 2014)*, 13-17.
- [c.10] Mullenbach, J., Shultz, C., Piper, A.M., Peshkin, M.A., and Colgate, J.E. (2013). Surface Haptic Interactions with a TPad Tablet. *Extended Abstracts of ACM Symposium on User Interface Software and Technology (UIST 2013)*, 7-8.
- [c.9] Beheshti, E., Fitzpatrick, C., Hope, A., Piper, A.M., and Horn, M. (2013). Circuit in Pieces: Understanding Electricity from Electrons to Light Bulbs. *Extended Abstracts of ACM Conference on Human Factors in Computing Systems (CHI 2013)*, 691-696.
- [c.8] Mullenbach, J., Shultz, C., Piper, A.M., Peshkin, M.A., and Colgate, J.E. (2013). TPad Fire: Surface Haptic Tablet. *HAID Haptic and Audio Interaction Design*, Springer, 04/2013.
- [c.7] D'Angelo, S., Piper, A.M., and Hollan, J. (2013). Photos for Documentation and Communication in Early Childhood. *Extended Abstracts of ACM Conference on Computer-Supported Cooperative Work (CSCW 2013)*, 135-138.
- [c.6] Piper, A.M., Weibel, N., and Hollan, J. (2012). A Pen-Based Toolkit for Authoring Collaborative Language Activities. *Extended Abstracts of ACM Conference on Computer-Supported Cooperative Work (CSCW 2012)*, 269-270.
- [c.5] Weibel, N., Piper, A.M., and Hollan, J. (2010). HIPerPaper: Introducing Pen and Paper Interfaces for Ultra-Scale Wall Displays. *Symposium on User Interface Software and Technology (UIST 2010)*, 407-408.
- [c.4] Weibel, N., Piper, A.M., and Hollan, J. (2010). Exploring Pen and Paper

Interaction with High-Resolution Wall Displays. *Symposium on User Interface Software and Technology (UIST 2010)*, 455-456.

- [c.3] Piper, A.M. (2010). Supporting Medical Communication with a Multimodal Surface Computer. *Doctoral Consortium Extended Abstracts of Conference on Human Factors in Computing Systems (CHI 2010)*, 2899-2902.
- [c.2] Piper, A.M. and O'Brien, E. (2005). SIDES: Shared Interfaces to Develop Effective Social Skills. *2005 Stanford Computer Forum Annual Affiliates Meeting*, Stanford University, CA.
- [c.1] Hayes, G.R., Piper, A.M., Amar, B., Bevis, K.J., Newstetter, W., and Bruckman, A.S. (2004). Audience in Computer Learning: A Constructionist Interpretation. *Extended Abstracts of the International Conference of the Learning Sciences (ICLS 2004)*.

Magazine Articles

- [M.1] Piper, A.M., and Lazar, A. (2018). Co-design in health: What can we learn from art therapy? *Interactions*. 25(3), 70-73.

Organized Workshops and Workshop Proceedings

- [W.7] Knowles, B.H., Hanson, V.L., Rogers, Y., Piper, A.M., Waycott, J., Davies, N.A.J. (2019). HCI and Aging: Beyond Accessibility. *Workshop organized for the ACM Conference on Human Factors in Computing Systems (CHI 2019)*.
- [W.6] Harrington, C., and Piper, A.M. (2018). Informing Design Through Sociocultural Values: Co-Creation with Low-Income African-American Older Adults. *Proceedings of the 12th EAI International Conference on Pervasive Computing Technologies for Healthcare (Pervasive Health 2018)*.
- [W.5] Piper, A.M., Gergle, D., and Lazar, A. (2017). The Future of Online Interaction and Older Adulthood. *Organized Workshop held at Northwestern University*.
- [W.4] Lazar, A., Cornejo, R., and Piper, A.M. (2016). Can We Design for Vulnerability without Contributing to Disempowerment? Position paper presented at the *Workshop on Exploring Social Justice, Design, and HCI at the ACM Conference on Human Factors in Computing Systems (CHI 2016)*.
- [W.3] Feuston, J., and Piper, A.M. (2016). Understanding the Online Social Lives of Young Adults with Traumatic Brain Injury. Position paper presented at the *Workshop on Computing in Mental Health at the ACM Conference on Human Factors in Computing Systems (CHI 2016)*.
- [W.2] Brewer, R., Cornejo, R., and Piper, A.M. (2015). Understanding How to Care for Aging Generations Online. Position paper presented at the *Workshop on The Future of Networked Privacy at the ACM Conference on Computer-Supported Cooperative Work (CSCW 2015)*.
- [W.1] Piper, A.M. (2008). Cognitive and Pedagogical Benefits of Multimodal Tabletop

Displays. Position paper presented at *The Workshop on Shared Interfaces for Learning*, Sept 11-12, 2008, University of Sussex.

Theses and Technical Reports

- [T.6] Piper, A.M. (2011). Augmenting Collocated Interaction: The Design of Assistive Technology to Support Face-to-Face Communication. *UCSD Cognitive Science, Doctoral Dissertation*, May 2011.
- [T.5] Piper, A.M. (2008). Supporting Communication between Deaf and Hearing Individuals with Multimodal Tabletop Displays. *UCSD Cognitive Science, Second Year Thesis*, May 2008.
- [T.4] Zagal, J.P., Piper, A.M., and Bruckman, A. (2006). Social and Technical Factors Contributing to Successful 3D Animation Authoring by Kids. *Georgia Institute of Technology Technical Report GIT-GVU-06-14*.
- [T.3] Piper, A.M. (2005). SIDES: A Cooperative Tabletop Computer Game for Social Skills Development. *Stanford University School of Education, Master's Thesis*, June 2005.
- [T.2] Morris, M.R., Piper, A.M., Cassanego, A., and Winograd, T. (2005). Supporting Cooperative Language Learning: Issues in Interface Design for an Interactive Table. *Stanford Computer Science Technical Report 2005-08*.
- [T.1] Hayes, G.R., Piper, A.M., Amar, B., Bevis, K.J., Newstetter, W., and Bruckman, A.S. (2004). Audience in Computer Learning: A Constructionist Interpretation. *Georgia Institute of Technology Technical Report GIT-GVU-04-13*.

Awards and Honors

| | |
|---|-----------|
| Northwestern University AT&T Research Professor | 2019-2020 |
| Best Paper, Honorable Mention Award [C.40] <i>ACM Conference on Human Factors in Computing Systems (CHI)</i> | 2020 |
| Best Paper Award [C.39] <i>ACM Conf. on Computer-Supported Cooperative Work & Social Computing (CSCW)</i> | 2019 |
| Best Paper, Honorable Mention Award [C.38] <i>ACM Conf. on Computer-Supported Cooperative Work & Social Computing (CSCW)</i> | 2019 |
| Best Paper, Honorable Mention Award [C.34] <i>ACM Conference on Human Factors in Computing Systems (CHI)</i> | 2019 |
| Simon Award for Teaching Excellence <i>School of Communication, Northwestern University</i> | 2018 |
| Best Paper Award [C.30] <i>ACM Conference on Human Factors in Computing Systems (CHI)</i> | 2018 |

| | |
|---|-------------|
| Best Paper Award [C.29] <i>ACM Conference on Human Factors in Computing Systems (CHI)</i> | 2018 |
| U.S. National Academy of Sciences Kavli Fellow | 2018 |
| Best Paper Award [C.27] <i>ACM Conference on Human Factors in Computing Systems (CHI)</i> | 2017 |
| Best Paper, Honorable Mention Award [C.26] <i>ACM Conference on Human Factors in Computing Systems (CHI)</i> | 2017 |
| Best Paper, Honorable Mention Award [C.24] <i>ACM Conf. on Computer-Supported Cooperative Work & Social Computing (CSCW)</i> | 2017 |
| Best Paper, Honorable Mention Award [C.23] <i>ACM Conf. on Computer-Supported Cooperative Work & Social Computing (CSCW)</i> | 2017 |
| National Science Foundation Early Career Development Award <i>NSF CAREER, CISE IIS Division</i> | 2016 |
| Best Paper Award [C.22] <i>ACM Conference on Designing Interactive Systems (DIS)</i> | 2016 |
| Best Paper, Honorable Mention Award [C.20] <i>ACM Conference on Human Factors in Computing Systems (CHI)</i> | 2016 |
| Alumnae of Northwestern Award for Curriculum Development | 2014 |
| Best Paper, Honorable Mention Award [C.13] <i>ACM Conference on Human Factors in Computing Systems (CHI)</i> | 2014 |
| UC-San Diego Interdisciplinary Scholar Award | 2011 |
| Best Student Paper Award [C.6] <i>ACM Conference on Computers and Accessibility (ASSETS)</i> | 2010 |
| Doctoral Consortium Support Grant <i>ACM Conference on Human Factors in Computing Systems (CHI)</i> | 2010 |
| National Science Foundation Graduate Research Fellowship | 2004 - 2009 |

Research Grants and Awards

External Funding

| Title / Source | Period | Amount |
|---|-------------|-------------|
| <i>CHS: Medium: Next Generation Content Production Tools for People with Vision Impairments</i> | | |
| National Science Foundation (IIS-1901456) | 2019 - 2023 | \$1,199,903 |

Role: PI

CAREER: Advancing Online Social Support for Older Adults with Disabilities
National Science Foundation (IIS-1551574) 2016 - 2021 \$499,924
Role: PI

EXP: Advancing Early STEM Learning through Haptic Feedback Displays
National Science Foundation (IIS-1522921) 2015 - 2019 \$547,881
Role: PI

EAGER: Understanding Online Communication for Older Adults with Late-Life Vision Loss
National Science Foundation (IIS-1533340) 2015 - 2016 \$127,272
Role: PI

Internal Funding

| Title / Source | Period | Amount |
|--|---------------|---------------|
| <i>Designing Cooperative Systems for Health Information Sharing Involving People with Dementia</i> Delaney Fund | 2017 - 2018 | \$50,000 |
| Role: PI | | |

| | | |
|---|-------------|----------|
| <i>Making and Inclusivity</i> Provost Grant for Faculty Innovation in Diversity and Equity | 2017 - 2018 | \$14,000 |
| Role: Co-PI | | |

| | | |
|--|-------------|----------|
| <i>Workshop on the Future of Online Interaction for Older Adults</i> Communication Studies Department Excellence Funding Initiative Award | 2015 - 2017 | \$21,000 |
| Role: PI | | |

| | | |
|---|-------------|----------|
| <i>Hybrid Social Media for Older Adult Health and Wellbeing</i> Robert and Kaye Hiatt Fund | 2014 - 2015 | \$71,200 |
| Role: PI | | |

| | | |
|---|-------------|----------|
| <i>Assistive Communication Design</i> Alumnae of Northwestern Award for Curriculum Development | 2014 - 2015 | \$12,500 |
| Role: PI | | |

| | | |
|---|-------------|---------|
| School of Communication Innovation Fund | 2013 - 2014 | \$5,000 |
| Role: PI | | |

Invited External Presentations and Talks

Piper, A.M. "Older Adults as Content Producers: Understanding and Designing to Support Lifelong Online Engagement". *University of Iowa, Computer Science Colloquium* (2019).

Piper, A.M. "Creating, Sharing, and Privacy: Designing Social Technologies for Older Adults". *Stanford University, Seminar on People, Computers, and Design* (2017).

Piper, A.M. “Creating, Sharing, and Privacy: Designing Social Technologies for Older Adults”. *University of California, Irvine, Department of Informatics Seminar Series* (2016).

Piper, A.M. “Creating, Sharing, and Privacy: Designing Social Technologies for Older Adults”. *University of California, Berkeley, Berkeley Institute for Design Seminar Series* (2016).

Piper, A.M. “The Role of HCI in Older Adulthood”. *Opening Keynote for MexIHC Conference*. Colima, Mexico (2016).

Piper, A.M. “Creating, Sharing, and Privacy: Online Interaction for Vulnerable Populations”. *Indiana University, Bloomington, School of Informatics and Computing Colloquium Series* (2016).

Piper, A.M. “Designing Social Communication Technologies for Older Adults”. *Microsoft Research, Redmond* (2014).

Piper, A.M. “Designing Social Communication Technologies for Older Adults”. *University of Washington, Design Use Build Seminar Series* (2014).

Piper, A.M. “Designing Social Communication Technologies for Older Adults”. *University of Michigan, Workshop on Social Media Use and Older Adults* (2013).

Piper, A.M. “Designing Hybrid Media for Language Learning and Communication”. *DePaul University, School of Computing Research Colloquium* (2013).

Internal Presentations and Talks

Domain Dinner, Human Computer Frontier (May 2019)
Computer Science, Cognitive Systems Brown Bag (Apr 2016)
Communication Sciences and Disorders, Department Colloquium (Mar 2015)
Communication Studies, Family Communication, Guest Lecture (May 2015)
Media, Technology & Society, Graduate Seminar, Guest Lecture (2012, 2013, 2014)
Health Communication MS Program, Guest Lecture (Nov 2014)
Communication Studies, Technology & Human Interaction, Guest Lecture (May 2014)
NU EECS Intro to HCI, Guest Lecture (Feb 2014)
Segal Design and Learning Seminar Series (October 2012)

Professional Experience

Senior Research Associate, LeapFrog Inc. (Emeryville, CA) 2006 - 2007
Lead researcher on all aspects of usability and user experience for FLY Fusion digital pen and applications.

User Experience Researcher, Microsoft Corp. (Redmond, WA) 2005 - 2006
Conducted user experience research on Microsoft Surface, large multi-touch surface computer.

Teaching

Instructor, Spring 2016, 2017, Winter 2019, 2020

MTS 525: Qualitative Methods for Understanding Technology Use and Design
Northwestern University

Instructor, Fall 2016, 2017, 2019

COMM_ST 294: Living with Communication Technology
Northwestern University

Instructor, Spring 2017, 2018

HLTH_COM 445: Designing Health User Experiences
Northwestern University

Instructor, Spring 2015

COMM_ST 398: Assistive Communication Design
Northwestern University

Instructor, Fall 2014

COMM_ST 294: Media, Design, and Disability
Northwestern University

Instructor, Fall 2013

COMM_ST 398: Contextual Interviewing for Design
Northwestern University

Instructor, Fall 2012, Spring 2014

MTS 525: Gesture-Based Interface Design
Northwestern University

Instructor, Spring 2012

COGS 160 Designing Gesture-Based Interfaces
University of California, San Diego

Instructor, Winter 2012

COGS 121: Human-Computer Interaction Programming Studio
University of California, San Diego

Instructor, Fall 2011

COGS 120: Human-Computer Interaction
University of California, San Diego

University Service

Northwestern University:

| | |
|---|-------------|
| University Office of Equity Faculty Appeals Committee | 2019 - 2020 |
| Women in Computing Faculty Advisory Board | 2016 - 2020 |
| Segal Design Institute Faculty Research Council | 2013 - 2020 |
| TSB Graduate Admissions Committee Chair | 2017 - 2020 |
| Communication Sciences & Disorders Faculty Hiring Committee | 2019 - 2020 |
| Comm Studies, Departmental Program Review Committee | 2017 - 2018 |

| | |
|--|-------------|
| Computer Science Faculty Hiring Committee | 2017 - 2018 |
| TSB Graduate Admissions Committee | 2013 - 2014 |
| Comm Studies, Computation and Communication Search Committee | 2016 - 2017 |
| Women in Computing, faculty advisor | 2014 - 2016 |
| Comm Studies, Curriculum Committee | 2013 - 2015 |
| Comm Studies, Communication and Health Search Committee | 2014 - 2016 |
| Comm Studies, Interim Digital Media Module Coordinator | 2015 |

University of California, San Diego:

| | |
|--|-------------|
| Women in HCI @ UCSD, Group Founder & Organizer | 2008 - 2012 |
| Graduate Studies Teaching Development Advisory Committee | 2008 - 2011 |
| Cognitive Science Department Recruitment Committee | 2008 - 2010 |
| Graduate Student Peer Mentor | 2009 - 2010 |

Professional Service

Conference Organizing Committee Member:

| | |
|--------------------------------|------|
| ACM CSCW, Best Papers Co-Chair | 2019 |
| ACM ASSETS, Best Papers Chair | 2017 |
| ACM CSCW, Demos Co-Chair | 2016 |
| ACM ITS, Treasurer | 2012 |

Program Committee Member:

| | |
|--|----------------------------|
| Subcommittee Chair: CHI Conference, Technical Papers & Notes | 2019 |
| Associate Chair: CHI Conference, Technical Papers & Notes | 2015 - 2018 |
| Associate Chair: GROUP Conference, Technical Papers | 2018 |
| Associate Chair: CSCW Conference, Technical Papers | 2014 - 2015, 2017 |
| Associate Chair: ASSETS Conference, Technical Papers | 2012 - 2015, 2017, 2020 |
| Associate Chair: HCOMP Conference, Technical Papers | 2015 |
| Associate Chair: ITS Conference, Technical Papers | 2012 - 2013 |
| Associate Chair: Pervasive Health Conf., Technical Papers | 2012 - 2013 |
| Associate Chair: UCAmI Conference, Technical Papers | 2011 |

Journal Editorial Boards:

| | |
|---|----------------|
| Transactions on Accessible Computing (TACCESS) | 2019 - Present |
| Transactions on Computer-Human Interaction (ToCHI) | 2017 - Present |
| Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT), Associate Editor | 2017 - 2019 |

Ad Hoc Reviewer (Journals):

| |
|---|
| Transactions on Computer-Human Interaction (ToCHI) |
| Computer Supported Cooperative Work (CSCW) |
| International Journal of Human-Computer Studies (IJHCS) |
| Universal Access in the Information Society (UAIS) |
| ACM Transactions on Accessible Computing (TACCESS) |
| Behavior and Information Technology |
| Proceedings of the ACM on Interactive, Multimedia, Wearable and Ubiquitous Technologies (IMWUT) |
| International Journal of Learning Technologies (IJLT) |

Journal of Entertainment Computing

Reviewer (Conferences):

ACM Conference on Human Factors in Computing Systems (CHI)
ACM Conference on Computer-Supported Cooperative Work & Social Computing (CSCW)
ACM Conference on Computers and Accessibility (ASSETS)
ACM User Interface Software and Technology Symposium (UIST)
ACM International Conference on Supporting Group Work (GROUP)
ACM Conference on Interaction Design and Children (IDC)
ACM Conference on Ubiquitous Computing (UBICOMP)
ACM International Conference on Interactive Tabletops and Surfaces (ITS)
ICST Conference on Pervasive Computing Technologies for Healthcare
Symposium on Ubiquitous Computing & Ambient Intelligence (UCAmI)
Hawaii International Conference on Systems Sciences (HICSS)

Grant Reviewer:

National Science Foundation
National Institutes of Health

Memberships:

Association for Computing Machinery (ACM)
ACM Special Interest Group on Computer-Human Interaction (SIGCHI)
International Communication Association (ICA)

Advising

Postdoctoral Mentoring:

| | |
|--|-------------|
| Elham Beheshti (Northwestern, Computer Science PhD) | 2017 - 2019 |
| Christina Harrington (Georgia Tech, Industrial Design PhD) | 2017 - 2019 |
| Amanda Lazar (University of Washington, BHI PhD) | 2014 - 2017 |
| Raymundo Cornejo (CICESE, Computer Science PhD) | 2014 - 2015 |

Doctoral Thesis Committee Chair:

| | |
|---------------------------------------|------|
| Jessica Feuston (NU, TSB PhD Program) | 2020 |
| Robin Brewer (NU, TSB Program) | 2017 |

Doctoral Thesis Committee Member:

| | |
|---|-------------|
| Ashley Walker (NU, MTS PhD Program) | In Progress |
| Eleanor Burgess (NU, MTS PhD Program) | In Progress |
| Scott Cambo (NU, TSB PhD Program) | In Progress |
| Mmachi Obiorah (NU, Computer Science PhD Program) | In Progress |
| Noah Liebman (NU, TSB Program) | In Progress |
| Madeline Smith (NU, TSB Program) | In Progress |
| Mark Diaz (NU, TSB PhD Program) | 2020 |
| Sarah Pila (NU, MTS PhD Program) | 2020 |
| Silvia Lovato (NU, MTS PhD Program) | 2019 |
| Sneha Narayan (NU, TSB Program) | 2019 |
| Sarah D'Angelo (NU, TSB Program) | 2018 |
| Sabrina Connell (NU, MTS Program) | 2018 |
| Elham Beheshti (NU, Computer Science) | 2017 |

| | |
|---|------|
| Colin Fitzpatrick (NU, TSB Program) | 2017 |
| Sarah Alsulaiman (NU, Computer Science) | 2015 |

Graduate Thesis Adviser:

| | |
|--|----------------|
| Abir Saha (NU, TSB PhD Program) | 2018 - Present |
| Katya Borgos-Rodriguez (NU, TSB PhD Program) | 2017 - Present |
| Emily Wang (NU, TSB PhD Program) | 2016 - Present |
| Jessica Feuston (NU, TSB PhD Program) | 2015 - 2020 |
| Robin Brewer (NU, TSB PhD Program) | 2013 - 2017 |
| Bri Hightower (NU, MTS PhD Program) | 2016 - 2017 |
| Marlon Twyman (NU, TSB PhD Program) | 2013 – 2014 |

Master’s Thesis Committee Member, Reader, Adviser:

| | |
|---|------|
| Lily Barghi (NU, Computer Science MS Program) | 2019 |
| Haridu Senadeera (NU, Computer Science MS Program) | 2017 |
| Yongfu Relic Wang (NU, Computer Science MS Program) | 2017 |
| Bri Hightower (NU, MTS PhD Program) | 2017 |
| Lisa Hurwitz (NU, MTS PhD Program) | 2013 |
| Joe Mullenbach (NU, Mechanical Engineering PhD Program) | 2013 |

Qualifying Exams Supervised:

| | |
|---|------------|
| Maitraye Das (NU, TSB PhD Program) | 2019 |
| Katya Borgos-Rodriguez (NU, TSB PhD Program) | 2019 |
| Emily Wang (NU, TSB PhD Program) | 2017, 2019 |
| Phoebe Jean-Pierre (NU, MTS PhD Program) | 2018 |
| Jessica Feuston (NU, TSB PhD Program) | 2017, 2018 |
| Bri Hightower (NU, MTS PhD Program) | 2017 |
| Sarah D’Angelo (NU, TSB PhD Program) | 2016 |
| Silvia Lovato (NU, MTS PhD Program) | 2016 |
| Robin Brewer (NU, TSB PhD Program) | 2014, 2015 |
| Emily Harburg (NU, TSB PhD Program) | 2014 |
| Noah Liebman (NU, TSB PhD Program) | 2014 |
| Drew Cingel (NU, MTS PhD Program) | 2014 |
| Elham Beheshti (NU, Computer Science PhD Program) | 2013 |
| Pei-Yi Kuo (NU, TSB PhD Program) | 2013 |

Segal Design Cluster Fellowship Advising:

| | |
|---|-------------|
| Mmachi Obiorah (NU, Computer Science PhD Program) | 2016 - 2017 |
| Robin Brewer (NU, TSB PhD Program) | 2015 - 2016 |
| Craig Shultz (NU, Mechanical Engineering PhD Program) | 2014 - 2015 |
| Krystal Villanosa (NU, Learning Sciences PhD Program) | 2014 - 2015 |
| Joe Mullenbach (NU, Mechanical Engineering PhD Program) | 2013 - 2014 |

Additional Graduate Research Advising and Mentoring:

| | |
|--|-------------|
| Evan Li (NU, EDI MS Program) | 2019 - 2020 |
| Yongfu Wang (NU, Computer Science MS Program) | 2017 |
| Haridu Senadeera (NU, Computer Science MS Program) | 2017 |
| Mengchao Wang (NU, Computer Science MS Program) | 2015 - 2016 |
| Xiaoning (Sean) Ni (NU, Computer Science MS Program) | 2015 |
| Caitlin Unumb (NU, Health Communication MS Program) | 2015 |
| Silvia Lovato (NU, MTS PhD Program) | 2015 - 2019 |

| | |
|--|-------------|
| Lisa Hurwitz (NU, MTS PhD Program) | 2014 - 2015 |
| Courtney Rae Mays (NU, Learning Sciences MA Program) | 2014 - 2015 |
| Drew Cingel (NU, MTS PhD Program) | 2013 - 2016 |
| Courtney Blackwell (NU, MTS PhD Program) | 2013 - 2015 |
| Sabrina Connell (NU, MTS PhD Program) | 2013 - 2014 |
| Xiaofeng Zhu (NU, Computer Science MS Program) | 2014 |
| Alexis Hope (NU, TSB PhD Program) | 2013 |

Undergraduate Research Advising and Mentoring:

| | |
|---|----------------|
| Tommy McHugh (NU, Computer Science) | 2019 - Present |
| Cooper Barth (NU, Computer Science) | 2019 - Present |
| Emma McDonnell (NU, Computer Science) | 2017 - 2019 |
| Dana Choi (NU, Statistics and Economics) | 2018 |
| Charlotte Marshall-Fricker (NU, Communication Studies) | 2015 - 2018 |
| Stacey Chao (NU, Computer Science) | 2017 |
| Janet Lee (NU, Communication Studies) | 2016 - 2017 |
| Karina Sirota (NU, Communication Studies) | 2015 - 2016 |
| Laurelle Banta (NU, Mechanical Engineering) | 2015 - 2016 |
| Chelsea Kim (NU, Communication Studies) | 2013 - 2016 |
| Lauren Kandell (NU, Communication Studies) | 2015 |
| Shuran Zhang (NU) | 2015 |
| Magan Omar (NU, Electrical Engineering) | 2014 - 2015 |
| Antonia Agbeh (NU, Cognitive Science) | 2013 - 2015 |
| Vanessa Oguamanam (Univ. of Maryland, Computer Science) | 2014 |
| Scott Neaves (NU, Computer Science) | 2013 - 2014 |
| Ted Schwaba (NU, Communication Studies) | 2013 - 2014 |
| Mindy Chau (NU, Biomedical Engineering) | 2013 - 2014 |
| Sarah D'Angelo (UCSD, Cognitive Science; honors thesis) | 2013 |
| Matthew Hong (UCSD, Cognitive Science; honors thesis) | 2012 |
| Amanda Lazar (UCSD, Electrical Engineering) | 2011 |
| Amanda Legge (UCSD, Cognitive Science; honors thesis) | 2011 |
| Anna Ostberg (UCSD, Cognitive Science; honors thesis) | 2009 |
| Jordan Davison (UCSD, Cognitive Science; honors thesis) | 2009 |
| Ross Campbell (UCSD, Cognitive Science) | 2009 |
| Matt Wilczynski (UCSD, Cognitive Science) | 2009 |
| Nick Gills (UCSD, Cognitive Science and Philosophy) | 2008 |