Nikhil Kaza

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Education

University of Illinois　　　　　　　　　　　　　　　　　　　*Urbana Champaign*
Ph.D. in Regional Planning　　　　　　　　　　　　　　　　　　　　*2008*
- Dissertation Title: "Reasoning with Plans: Inference of Semantic Relationships among Plans about Urban Development"

University of Illinois　　　　　　　　　　　　　　　　　　　*Urbana Champaign*
M.S. in Applied Mathematics　　　　　　　　　　　　　　　　　　　　*2007*

University of Illinois　　　　　　　　　　　　　　　　　　　*Urbana Champaign*
M.U. P. in Urban Planning　　　　　　　　　　　　　　　　　　　　*2004*

Indian Institute of Technology　　　　　　　　　　　　　　　*Kharagpur, India*
B.Arch (Hons.) in Architecture　　　　　　　　　　　　　　　　　　*2001*

Experience

Department of City & Regional Planning　　　*University of North Carolina at Chapel Hill*
Professor　　　　　　　　　　　　　　　　　　　　*Jul 2021 - Present*

Center for Urban & Regional Studies　　　　*University of North Carolina at Chapel Hill*
Director　　　　　　　　　　　　　　　　　　　　*Jul 2021 -Jul 2024*

Environment, Ecology & Energy Program　　　*University of North Carolina at Chapel Hill*
Adjunct Associate Professor　　　　　　　　　　　　　*Jul 2016 - Jul 2024*

School of Architecture, Civil & Environmental Engineering　　*Ecole Polytechnique Fédérale de Lausane*
Host Professor　　　　　　　　　　　　　　　　　*Jan 2019 - May 2019*

Department of City & Regional Planning　　　*University of North Carolina at Chapel Hill*
Associate Professor　　　　　　　　　　　　　　　　*Jul 2015 - Jul 2021*

Department of City & Regional Planning　　　*University of North Carolina at Chapel Hill*
Associate Chair　　　　　　　　　　　　　　　　　*Jul 2015 - Jul 2017*

Department of City & Regional Planning　　　*University of North Carolina at Chapel Hill*
Assistant Professor　　　　　　　　　　　　　　　　*Jul 2009 - Jul 2015*

Curriculum of Ecology & Environment　　　　*University of North Carolina at Chapel Hill*
Adjunct Assistant Professor　　　　　　　　　　　　　*Jan 2012 - Jul 2016*

EDAW Inc.　　　　　　　　　　　　　　　　　　　*Washington, DC*
Sustainability Systems Modeler　　　　　　　　　　　　*Jan 2008 - Dec 2008*

National Center for Smart Growth Research & Education　　*University of Maryland at College Park*
Post Doctoral Fellow　　　　　　　　　　　　　　　　*Nov 2007 - Jun 2009*

Grants

Awarded Grants

- "Beyond Visuals: Improving Accessibility of Data Curation and Multi-Modal Representations for People of all Abilities through Reproducible Workflows," PI, Institute of Museum and Library Services (IMLS) Laura Bush 21st Century Librarian Program, Grant #RE-254891-OLS-23, $649,921, Aug 2023 - July 2026 (ongoing).

- "Promoting Computational Thinking Skills for Blind and Visually Impaired Teens through Accessible Library Makerspaces," PI, Institute of Museum and Library Services (IMLS) National Leadership Grants, Grant #LG-252360-OLS-22, $498,638, Aug 2022 - May 2025 (ongoing).

- "Inclusive Data Science: Fostering Accessibility and Reproducibility with Multimodal Learning Strategies," PI, Teach Access Faculty Grants, Tier 3, $5,000, May 2023 - May 2024 (ongoing).

- "Improving Accessible Reproducibility for Data Science Publishing System," PI, Posit PBC (unrestricted gift), $54,327, May 2022 - Present (ongoing).

- "Co-designing an Alexa-Based Conversational mHealth System with Visually Impaired People to Promote Physical Activities," Co-PI, Center on Health, Aging, and Disability's (CHAD) Pilot Grant Program at the University of Illinois at Urbana-Champaign, $29,866, 2023-2024 (ongoing).

- "Category I: Crossing the Divide Between Today's Practice and Tomorrow's Science," Senior Personnel, National Science Foundation (NSF), Grant #2005572, $10,000,000.00, Oct 2021 - Sept 30, 2026 (.5 FTE academic year) (ongoing).

- "Insight without Sight: Enhancing Data Literacy through Multimodal Data Science Education - Smith-Kettlewell Summer Institute," Subaward PI, Rehabilitation Engineering Research Centers (RERC) Program: RERC on Blindness and Low Vision, National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR), Grant #90REGE0018-01-00, $11,975, July 17, 2023 - August 11, 2023 (completed).

- "Data Accessibilization: Making Data Science Education Accessible for Blind Learners," PI, Wallace Foundation, Emerging Scholars Program, International Society of the Learning Sciences, $10,000, Jan 2022 - Dec 2022 (completed).

Under-Review Grants

- "Collaborative Research: SpatioTemporal Representations for Information and Data Equity: An Interactive AudioTactile System for BVI Data Scientists," PI (at UIUC), National Science Foundation (NSF), Workplace Equity for Persons with Disabilities in STEM and STEM Education (nsf23593), $573,548 (for UIUC) out of $1,499,917 total, July 2024 - June 2028 (under review).

Publications

Refereed Journal Papers

Choi, Soyoung, and JooYoung Seo. 2021. "Trends in Healthcare Research on Visual Impairment and Blindness: Use of Bibliometrics and Hierarchical Cluster Analysis." *Ophthalmic Epidemiology* 28 (4): 277–84. `https://doi.org/10.1080/09286586.2020.1863993`.

Choi, Soyoung, JooYoung Seo, Manuel Hernandez, and Spyros Kitsiou. 2024. "Conversational Agents in mHealth: Use Patterns, Challenges, and Design Opportunities for Individuals with Visual Impairments." *Journal of Technology in Behavioral Science*, March. `https://doi.org/10.1007/s41347-024-00409-7`.

Lee, Jarrett G. W., Kyungyeon Lee, Bongshin Lee, Soyoung Choi, JooYoung Seo, and Eun Kyoung Choe. 2023. "Personal Health Data Tracking by Blind and Low-Vision People: Survey Study." *Journal of Medical Internet Research* 25 (1): e43917. `https://doi.org/10.2196/43917`.

Moon, Jewoong, Gi Woong Choi, and Joo Young Seo. 2023. "Revisiting Multimedia Learning Design Principles in Virtual Reality-Based Learning Environments for Autistic Individuals." *Virtual Reality*, September. `https://doi.org/10.1007/s10055-023-00856-2`.

Moon, Jewoong, Daeyeoul Lee, Gi Woong Choi, Jooyoung Seo, Jaewoo Do, and Taehyeong Lim. 2023. "Learning Analytics in Seamless Learning Environments: A Systematic Review." *Interactive Learning Environments* 0 (0): 1–18. `https://doi.org/10.1080/10494820.2023.2170422`.

Seo, JooYoung. 2019. "Is the Maker Movement Inclusive of ANYONE?: Three Accessibility Considerations to Invite Blind Makers to the Making World." *TechTrends* 63 (5): 514–20. `https://doi.org/10.1007/s11528-019-00377-3`.

Seo, JooYoung, and Soyoung Choi. 2022. "Are Blind People Considered a Part of Scientific Knowledge Producers?: Accessibility Report on Top-10 SCIE Journal Systems Using a Tripartite Evaluation Approach." *Journal on Technology and Persons with Disabilities*.

Seo, JooYoung, and Mine Dogucu. 2023. "Teaching Visual Accessibility in Introductory Data Science Classes with Multi-Modal Data Representations." *Journal of Data Science*, March, 1–14. `https://doi.org/10.6339/23-JDS1095`.

Seo, JooYoung, and Sean McCurry. 2019. "LaTeX Is NOT Easy: Creating Accessible Scientific Documents with r Markdown." Edited by Klaus Miesenberger, Shirley Ruiz, and Julia Santiago. *Journal on Technology and Persons with Disabilities* 7:157–71.

Seo, JooYoung, Jewoong Moon, Gi Woong Choi, and Jaewoo Do. 2022. "A Scoping Review of Three Computational Approaches to Ethnographic Research in Digital Learning Environments." *TechTrends* 66 (1): 102–11. `https:`

//doi.org/10.1007/s11528-021-00689-3.

Seo, JooYoung, and Gabriela T. Richard. 2021. "SCAFFOLDing All Abilities into Makerspaces: A Design Framework for Universal, Accessible and Intersectionally Inclusive Making and Learning." *Information and Learning Sciences* 122 (11/12): 795–815. https://doi.org/10.1108/ILS-10-2020-0230.

Papers in Refereed Conference Proceedings

Huh, Mina, and JooYoung Seo. 2022. "A Duoethnographic Study of a Mixed-Ability Team in a Collaborative Group Programming Project." In *Proceedings of the 15th International Conference on Computer-Supported Collaborative Learning - CSCL 2022*, edited by Armin Weinberger, Wenli Chen, Davinia Hernández-Leo, and Bodong Chen, 471–74. International Society of the Learning Sciences.

Kaushik, Smirity, Natã M. Barbosa, Yaman Yu, Tanusree Sharma, Zachary Kilhoffer, JooYoung Seo, Sauvik Das, and Yang Wang. 2023. "GuardLens: Supporting Safer Online Browsing for People with Visual Impairments." In *Nineteenth Symposium on Usable Privacy and Security (SOUPS 2023)*, 361–80. Anaheim, CA: USENIX Association. https://www.usenix.org/conference/soups2023/presentation/kaushik.

Kim, Soo Hyeon, Ayoung Yoon, and JooYoung Seo. 2023. "Trend of Collaboration in STEM Education in Informal Learning Institutions Based on IMLS-Funded Projects." *Proceedings of the Association for Information Science and Technology* 60 (1): 625–29. https://doi.org/10.1002/pra2.828.

Konecki, Mario, Sandra Lovrenčić, JooYoung Seo, and Charles LaPierre. 2017. "The Role of ICT in Aiding Visually Impaired Students and Professionals." *Proceedings of the 11th Multidisciplinary Academic Conference*, 148.

Lee, Cheuk Yin Phipson, Zhuohao Zhang, Jaylin Herskovitz, JooYoung Seo, and Anhong Guo. 2021. "CollabAlly: Accessible Collaboration Awareness in Document Editing." In *The 23rd International ACM SIGACCESS Conference on Computers and Accessibility*, 1–4. 55. https://doi.org/10.1145/3441852.3476562.

———. 2022. "CollabAlly: Accessible Collaboration Awareness in Document Editing." In *CHI Conference on Human Factors in Computing Systems*, 1–17. CHI '22. New York, NY, USA: Association for Computing Machinery. https://doi.org/10.1145/3491102.3517635.

Lee, Jarrett G. W., Bongshin Lee, Soyoung Choi, JooYoung Seo, and Eun Kyoung Choe. 2024. "Identify, Adapt, Persist: The Journey of Blind Individuals with Personal Health Technologies." *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies* 8 (2): 51:1–21. https://doi.org/10.1145/3659585.

Park, Jaihyun, JooYoung Seo, and Jae Young Lee. 2023. "Exploring an Online Community of Blind Programmers by Using Topic Modeling and Network Analysis." *Proceedings of the Association for Information Science and Technology* 60 (1): 1096–98. https://doi.org/10.1002/pra2.956.

Seo, JooYoung. 2018. "Accessibility and Inclusivity in Making: Engaging Learners with All Abilities in Making Activities." In *Proceedings of the 3rd Learning Sciences Graduate Student Conference*, 141–42. Nashville, TN: LSGSC Planning Team.

———. 2019. "Discovering Informal Learning Cultures of Blind Individuals Pursuing STEM Disciplines: A Quantitative Ethnography Using Listserv Archives." In *The First International Conference on Quantitative Ethnography: Doctoral Consortium*, S66–67. Madison, WI.

Seo, JooYoung, Mona AlQahtani, Xueying Ouyang, and Marcela Borge. 2017. "Embracing Learners with Visual Impairments in CSCL." In *Making a Difference: Prioritizing Equity and Access in CSCL, 12th International Conference on Computer Supported Collaborative Learning (CSCL) 2017*, edited by B K Smith, M Borge, E Mercier, and K Y Lim, 2:573–76. Philadelphia, PA: International Society of the Learning Sciences (ISLS).

Seo, JooYoung, and Mine Dogucu. 2022. "Teaching Visual Accessibility in the Introductory Data Science Classes: Why, What, When, and How." In *The 2022 Symposium on Data Science & Statistics*. Pittsburgh, PA, USA: American Statistical Association.

Seo, JooYoung, Sile O'Modhrain, Yilin Xia, Sanchita Kamath, Bongshin Lee, and James M. Coughlan. 2024. "Designing Born-Accessible Courses in Data Science and Visualization: Challenges and Opportunities of a Remote Curriculum Taught by Blind Instructors to Blind Students." In *EuroVis 2024 - Education Papers*, edited by Robert S. and Andersen Firat Elif E. and Laramee. The Eurographics Association. https://doi.org/10.2312/eved.20241053.

Seo, JooYoung, and Gabriela T Richard. 2018. "Accessibility, Making and Tactile Robotics: Facilitating Collaborative Learning and Computational Thinking for Learners with Visual Impairments." In *Rethinking Learning in the Digital Age: Making the Learning Sciences Count, 13th International Conference of the Learning Sciences (ICLS) 2018*, edited by J Kay and R Luckin, 3:1755–57. London, UK: International Society of the Learning Sciences (ISLS).

———. 2020. "Coding Through Touch: Exploring and Re-Designing Tactile Making Activities with Learners with Visual Dis/Abilities." In *Interdisciplinarity in the Learning Sciences, 14th International Conference of the Learning Sciences (ICLS) 2020*, edited by Melissa Gresalfi and Ilana Horn, 3:1373–80. Nashville, TN: International Society

of the Learning Sciences (ISLS).

Seo, JooYoung, and Megan Rogge. 2023. "Coding Non-Visually in Visual Studio Code: Collaboration Towards Accessible Development Environment for Blind Programmers." In *Proceedings of the 25th International ACM SIGACCESS Conference on Computers and Accessibility*, 1–9. ASSETS '23. New York, NY, USA: Association for Computing Machinery. `https://doi.org/10.1145/3597638.3614550`.

Seo, JooYoung, Yilin Xia, Bongshin Lee, Sean Mccurry, and Yu Jun Yam. 2024. "MAIDR: Making Statistical Visualizations Accessible with Multimodal Data Representation." In *Proceedings of the CHI Conference on Human Factors in Computing Systems*, 1–22. CHI '24. New York, NY, USA: Association for Computing Machinery. `https://doi.org/10.1145/3613904.3642730`.

Seo, JooYoung, Yilin Xia, Yu Jun Yam, and Sean McCurry. 2023. "MAIDR: Multimodal Access and Interactive Data Representation System for Inclusive Data Science Education." In *Proceedings of the 3rd Annual Meeting of the International Society of the Learning Sciences*, 51–54.

Zhang, Zhuohao (Jerry), Smirity Kaushik, JooYoung Seo, Haolin Yuan, Sauvik Das, Leah Findlater, Danna Gurari, Abigale Stangl, and Yang Wang. 2023. "ImageAlly: A Human-AI Hybrid Approach to Support Blind People in Detecting and Redacting Private Image Content." In *Nineteenth Symposium on Usable Privacy and Security (SOUPS 2023)*, 417–36. Anaheim, CA: USENIX Association. `https://www.usenix.org/conference/soups2023/presentation/zhang`.

Book Chapters

Seo, JooYoung, and Mine Dogucu. 2024. "Data Science and Accessibility." In *Teaching Accessible Computing*, edited by Amy Ko, Richard Ladner, and Alannah Oleso. University of Washington.

Conference Presentations and Invited Talks

Seo, J. (2024, March). *Unseen Insights: Empowering Autonomous Data Science by, with, and for Blind People*. Invited talk at the UC Irvine Donald Bren School of Information & Computer Sciences, Irvine, CA.

Seo, J. (2023, November). *Insight Over Eyesight: My Journey as a Blind Data Scientist*. Invited talk at the Chicago Lighthouse Career Fair, Chicago, IL (virtual).

Seo, J. (2023, November). *Beyond Sight: Envisioning Data Science Through Multimodal Access*. Invited as a keynote speaker at the 2023 UIUC iSchool's Research Showcase, Champaign, IL.

Seo, J. (2023, November). *Understanding Multi-Modality of Blind People Towards Inclusive STEM Learning*. Invited talk at the UIUC CI590 DELTA Seminar, Champaign, IL.

Seo, J. (2023, July). *Screen Reader User Experience Deep Dive*. Invited talk at the Microsoft Visual Studio Code Team, virtual.

Seo, J. (2023, June). *Perceiving Beyond Vision: My Journey Through Dreamscapes, Numerical Cognition, and a Blind Critique of Inclusive Data Visualization*. Invited talk at the Dagstuhl Inclusive Data Visualization Workshop, Dagstuhl, Germany.

Seo, J. (2023, May). *Enhancing Accessibility in Programming and Fostering Inclusive Data Science via Multimodal Strategies*. Invited talk at the Campus Research Computing Consortium, virtual.

Invited panel (2023, May): *Human Computer Relationships (**Work?**): Embodiment, Inclusive Design, Accessibility, and Emerging Technologies for Learning*, hosted by PhET Interactive Simulations at University of Colorado Boulder.

Invited demo by Microsoft (2023, April): *VSCode Accessibility*. VS Code Day 2023: `https://m.youtube.com/watch?v=X3qUfOB3x8Q`

Invited panel (2022, December): *Integrating Accessibility into a Computing Career*, hosted by Associate Professor Stacy Branham at Informatics of the University of California, Irvine. (virtual).

Seo, J. (2022, November). *Accessible Library Makerspaces*. Invited talk at the UIUC iSchool IS571: Accessibility in Library Resources, Champaign, IL (virtual).

Seo, J. (2022, September). *Digital Accessibility*. Invited panel at the INFOcon 2022, virtual.

Seo, J. (2022, April). *Accessible Data Visualization in a Reproducible Way*. Invited talk at Champaign-Urbana Data Science User Group, Champaign, IL (virtual).

Seo, J. (2022, March). *Understanding Multi-Modality of Blind People Towards Inclusive STEM Learning*. Invited talk at the UIUC iSchool Proseminar, Champaign, IL (virtual).

Seo, J. (2022, March). *Universal Design = Usability ∗ Accessibility (With Practical Examples Beyond Conceptual Frameworks)*. Invited talk at INTE 535 Analysis, Implementation, and Evaluation of Assistive Technology. Instructional Technology program of the University of Alabama, Tuscaloosa, AL (virtual).

Seo, J. (2022, March). *Your Condition is Not Your Conclusion*. Invited talk at HTM4311: Hotel Professional Development at the Hong Kong Polytechnic University (virtual).

Seo, J. (2021, November). *SCAFFOLDing All Abilities into Makerspaces*. Invited talk at the UIUC iSchool IS582: Make, Design, & Learn in Libraries, Champaign, IL (virtual).

Seo, J. (2021, October). *Non-Visual Strategies for Making Statistical-Computing Accessible*. Lightening talk at the National Center for Supercomputing Applications, Champaign, IL.

Seo, J. (2021, September). *Accessibility of Science Beyond Content Accessibility*. Talk presented at the Argonne National Laboratory (Maths and Computer Science Division): `https://www.anl.gov/event/accessibility-of-science-beyond-content-accessibility`.

Invited panel (2021, August). DO-IT Neuroscience for Neurodiverse Learners Faculty panel at the University of Washington, virtual.

Seo, J. (2021, June). *How to Learn to Code*. Invited Talk presented at the Nature, Webcast: `https://doi.org/10.1038/d41586-021-01638-z`.

Seo, J., & Richard, G. T. (2021, February). *Uncovering latent topics of blind people in computer science: structural topic modeling for an email corpus*. Poster presented at the 2nd International Conference on Quantitative Ethnography (ICQE), Malibu, CA.

Donegan, S. R., Porter, C., Fogel, A., Seo, J., Choi, S., & Eagan, B. (2021, February). *U.S. media coverage during COVID-19: an epistemic network analysis of bias, topic, and trajectory*. Poster presented at the 2nd International Conference on Quantitative Ethnography (ICQE), Malibu, CA.

Seo, J. (2021, January). *Accessible data science beyond visual models*. Talk presented at the rstudio::global(2021), Virtual: `https://global.rstudio.com/student/page/40617`.

Seo, J. (2020, September). *Discovering knowledge sharing patterns of blind people pursuing STEM disciplines: data science and computational linguistics on large-scale email corpora*. Poster presented at the Doctoral Consortium of the annual meeting of the ACM Richard Tapia Celebration of Diversity in Computing, virtual. *Awarded the Qualcomm scholarship*.

Seo, J., & Richard, G. T. (2020, April). *Maker inclusivity = maker accessibility: further interrogations for diverse participation*. Poster presented at the annual meeting of the American Educational Research Association (AERA), Virtual.

Seo, J., & Richard, G. T. (2018, April). *Furthering inclusivity in making: a framework for accessible design of makerspaces for learners with disabilities*. Poster presented at the annual meeting of the American Educational Research Association (AERA), New York City, NY.

Bunag, T., Aniela, L., Nielsen, M. C., & Seo, J. (2017, November). *The rapidly changing world of accessible online learning*. Presented at the Panel Discussion: DDL - Accessible Online Learning In Concurrent Presentation of the Association for Educational Communications and Technology (AECT), Jacsonville, FL.

Seo, J. (2017, September). *Tactile access to visualized statistical data using R*. Poster presented at the annual meeting of the ACM Richard Tapia Celebration of Diversity in Computing, Atlanta, GA.

Liao, J., Patcyk, M., Seo, J., & Hooper, S. (2016, October). *Using hierarchical linear modeling to measure growth rate in a gamified CBM environment*. Paper presented at the annual meeting of the Northeastern Educational Research Association (NERA), Trumbull, CT.

Seo, J. (2016, March). *Engaging blind learners in statistics study using R*. Presented at the annual meeting of the Teaching and Learning with Technology (TLT) Symposium, University Park, PA.

Kim, K., Seo, J., & Clariana, R. B. (2016, March). *Automatic knowledge structure measure in online courses*. Presented at the annual meeting of the Teaching and Learning with Technology (TLT) Symposium, University Park, PA.

Seo, J. (2015, November). *Assistive technologies for equal access in general education.* Presented at the annual meeting of the Association for Educational Communications and Technology (AECT), Indianapolis, IN.

Seo, J., & Park, E. (2015, October). *The more accessible, the more potential: simple tips for online accessibility.* Presented at the Technology and Learning Conference, Blue Bell, PA.

Media Coverage

Heckel, Jodi. 2023. "Information Sciences Professor Developing Tool to Make Data Visualizations Accessible to Blind Researchers, Students." News Bureau University of Illinois Urbana-Champaign. September 29, 2023. `https://news.illinois.edu/view/6367/107909242`.

Katsnelson, Alla. 2023. "These Tools Help Visually Impaired Scientists Read Data and Journals." *Nature* 615 (7951, 7951): 362–63. `https://doi.org/10.1038/d41586-023-00645-6`.

McCallen, Brian. 2023. "Data Visualization for the Blind." November 3, 2023. `https://speakingoutfortheblind.weebly.com/list-of-episodes-and-show-news/for-more-information-episode-329-data-visualization-tool-for-the-blind`.

Teaching Experience

- IS 407: Introduction to Data Science (spring 2022-present).

- IS 569: Internship (spring 2022). *Advised Ankita Khiratkar (MS IM).*

- IS 589: Independent Study (spring 2022). *Advised Chetna Beri (MS IM).*

- INFO 399: Individual Study (spring 2022). *Advised Leo Zhang (CS undergrad –> Currently, Master's student at UCLA Data Science dept).*

- IS 389: Independent Study (spring 2022). *Advised Miso Kim (BS IS).*

- IS 226: Introduction to Human-Computer Interaction (fall 2021). *Co-teaching with Dr. Yang Wang.*

- Served as an annual review committee member for iSchool Ph.d. student Smirity Kaushik (advisor Dr. Yang Wang) (spring 2022).

- Served as a field exam committee member for iSchool Ph.D. candidate Jaihyun Park (advisor Dr. Ryan Cordell) (spring 2022).

Awards and Honors

ACM Richard Tapia Celebration of Diversity in Computing Conference — *Virtual*
Qualcomm Scholarship — *Sep. 2020*
- Selected as one of the outstanding doctoral consortium proposals.

Disability:IN — *Alexandria, VA*
2020 NextGen Leaders — *Feb. 2020 - Jul. 2020*
- Selected as one of the leaders in the U.S. for diversity.

AccessComputing, University of Washington — *Seattle, WA*
AccessSTEM Resume contest winners Award — *Dec. 2019*
- Sponsored by The National Science Foundation (NSF).

The First International Conference on Quantitative Ethnography — *Madison, WI*
Best Doctoral Proposal Fellowship — *Oct. 2019*
- Sponsored by Cengage.

The PDK Educational Foundation — *University Park, PA*
Andrew V. Kozak Memorial Fellowship — *2019*
- Awarded $1,500 for research contribution to public education.

The Spencer Foundation — *Toronto, ON, Canada*
AERA Pre-Conference Travel Award — *Apr. 2019*

The Pennsylvania State University — *University Park, PA*
Delta Gamma Golden Anchor Award — *2015, 2017*

The National Science Foundation (NSF) *Atlanta, GA*
ACM RICHARD TAPIA CELEBRATION OF DIVERSITY IN COMPUTING CONFERENCE SCHOLARSHIP *Sep. 2017*
- Included free conference registration, shared hotel accommodations and a $500 travel stipend.

Microsoft Research *Atlanta, GA*
ACM STUDENT RESEARCH COMPETITION TRAVEL AWARD *Sep. 2017*
- $500 travel stipend was awarded for ACM TAPIA 2017 Student Research Competition (SRC).

AccessComputing, University of Washington *Seattle, WA*
CSUN CONFERENCE TRAVEL AWARD *Mar. 2017*
- Sponsored by The National Science Foundation (NSF).

College of Education *University Park, PA*
SUMMER TUITION ASSISTANCE FUNDING *2017*

College of Education *University Park, PA*
GRADUATE STUDENT TRAVEL GRANT *Aug. 2016 - Present*

Teaching and Learning with Technology *University Park, PA*
GRADUATE ASSISTANTSHIP *Aug. 2016 - Present*

Hyomyoung Scholarship *Seoul, South Korea*
OUTSTANDING ACADEMIC AWARD *2014 - 2019*

ANC Scholarship Foundation *Lake View Terrace, CA*
ALL NATIONS CHURCH GRADUATE SCHOLARSHIP *2016*

Service

School of Information Sciences at the University of Illinois at Urbana-Champaign *Champaign, IL*
SEARCH COMMITTEE FOR DIRECTOR/ASSISTANT DEAN, DIVERSITY, EQUITY, INCLUSION, AND ACCESSIBILITY (DEIA) *April 2022 - Present*

School of Information Sciences at the University of Illinois at Urbana-Champaign *Champaign, IL*
DIVERSITY COMMITTEE *Sep. 2021 - Apr. 2022*

International Web for All Conference (W4A) 2022 *Virtual*
PROGRAM COMMITTEE MEMBER *Dec. 2021 - Feb. 2022*

15th International Conference on Educational Data Mining *Durham*
ACCESSIBILITY CHAIR *Oct. 2021 - Jul. 2022*

Special issue on ethnography and learning design *TechTrends*
JOURNAL REVIEWER *Sep. 2021*

The Network of Academic Programs in the Learning Sciences (NAPLeS) *International Society of the Learning Sciences*
REVIEWER *2020*
- Reviewed abstracts on equity and disability.

The Pennsylvania State University *University Park, PA*
COLLEGE OF EDUCATION TECHNOLOGY COMMITTEE *Aug. 2019 - May. 2020*
- Worked as a student committee member to support understanding of educational technology for College of Education.

The Pennsylvania State University *University Park, PA*
LIBRARIES' ACCESSIBILITY STUDENT ADVISORY GROUP *Aug. 2019 - May. 2020*

The 14th International Conference of the Learning Sciences (ICLS) *Nashville, TN*
REVIEWER *2019*

The ACM CHI Conference on Human Factors in Computing Systems (CHI 2020, 2021) *Honolulu, HI, Yokohama, Japan*
REVIEWER *2019, 2020*

The 1st International Conference on Quantitative Ethnography (ICQE) *Madison, WI*
REVIEWER *2019*

The 3rd Learning Sciences Graduate Student Conference (LSGSC)

Reviewer

Nashville, TN

2018

The 2nd Learning Sciences Graduate Student Conference (LSGSC)

Reviewer

Bloomington, IN

2017

Center for Online Innovation in Learning (COIL), The Pennsylvania State University

Funding Reviewer

University Park, PA

2016

Current Memberships

- International Society of the Learning Sciences (ISLS)
- Association for Computing Machinery (ACM)
- American Statistical Association (ASA)
- International Society for Quantitative Ethnography (ISQE)
- International Association of Accessibility Professionals (IAAP)
- International Educational Data Mining Society (IEDMS)