

Lily Houtman

cartographer and GIScientist

portfolio: lilyhoutman.github.io

email: lhoutman@psu.edu

pronouns: they/them

RESEARCH INTERESTS

mobile and web cartography, user experience design, spatial data science, critical theory, data journalism

EDUCATION

The Pennsylvania State University 2024-present

Ph.D. Geography

Expected Graduation: Spring 2027

Advisor: Anthony C. Robinson

Committee: Cynthia Brewer (Geography/Information Sciences and Technology)

Mark Ortiz (Geography)

Pamela VanHaitisma (Communication Arts and Sciences)

Dissertation: *Evaluating the Production and Use of Mobile and Responsive Thematic Maps* (Forthcoming)

The Pennsylvania State University 2022-2024

M.S. Geography

Advisor: Anthony C. Robinson

Committee: Cynthia Brewer (Geography/Information Sciences and Technology)

Helen Greatrex (Geography/Statistics)

Thesis: *Mobile Thematic Map Design in Data Journalism: An Evaluation of Techniques, Challenges, and Opportunities*

University of Wisconsin – Madison 2018-2022

B.S. Cartography and GIS (Honors)

Advisor: Robert E. Roth

Thesis: *Mapping Presidential Elections: An Empirical Analysis of Effective Design Techniques*

Additional Degrees: B.S. Geography + B.S. Anthropology + Certificate in Archaeology

PROFESSIONAL and RESEARCH EXPERIENCE

Graduate Researcher – Mapping the Fracking Industry in Western PA 2025-present

The Pennsylvania State University, Department of Geography

PI: Dr. Jennifer Baka, Associate Professor of Geography

Graduate Researcher – Designing Non-Binary Maps to Reimagine Borderlands 2024-present

The Pennsylvania State University, Department of Geography

PI: Dr. Melissa W. Wright, Professor of Women's, Gender, and Sexuality Studies/Geography

Graduate Student Cartographer – The GeoGraphics Lab 2023-present

The Pennsylvania State University, Department of Geography

Creative Director: Dr. Alicia Iverson

Student Researcher – Mapping for a Sustainable World: QGIS Technical Supplement 2021-present

University of Wisconsin – Madison Cartography Lab, Department of Geography

PI: Dr. Robert E. Roth, Professor of Geography

Graduate Research Assistant – Beescape NexGen Geovisualization Tool	2022-2025
<i>The Pennsylvania State University, Departments of Geography and Entomology</i>	
PI: Dr. Christina Grozinger, Professor of Entomology	
Co-PI: Dr. Anthony C. Robinson, Professor of Geography	
Graduate Student Cartographer – Harm Mapping: Visualizing Sexual Harassment	2022-2024
<i>The Pennsylvania State University and Lafayette College</i>	
PI: Dr. Dana Cuomo, Associate Professor of Women's, Gender, and Sexuality Studies	
Web Development Intern	2021-2022
<i>United States Geological Survey, Web Mapping and Informatics Team</i>	
Undergraduate Student Cartographer – The UW–Madison Cartography Lab	2020-2022
<i>University of Wisconsin – Madison, Department of Geography</i>	
Creative Director: Tanya Anderson	

PEER-REVIEWED PUBLICATIONS

- Li, K., H Grab, M Buckner, **L Houtman**, M Kammerer., D McLaughlin, ... & CM Grozinger. 2026. Beescape and BeeSpatial: Making multi-scale environmental indicators of bee habitat accessible across audiences. *Environmental and Sustainability Indicators*, 101381.
- Roth, RE, A Iverson, A Kagawa, G Le Sourd, B Ricker, T Andersen, G Baldrice-Franklin, **L Houtman**, F Ilunga, M Lee, M-J Kraak. 2025. Making and remaking Mapping for a Sustainable World: a retrospective and prospective analysis as a case study in Processual Cartography. *International Journal of Cartography*, 11(3), p. 388-427.
- Houtman, L**, AC Robinson, D McLaughlin, and C Grozinger. 2025. Evaluating the Usability and Utility of a Spatial Decision Support System for Pollinator Ecology. *Ecological Informatics*, 89, p. 103182.
- Houtman, L**. 2025. Techniques, Challenges, and Opportunities in Mobile Thematic Map Design for Data Journalism. *Cartography and Geographic Information Science*, 53(1), p. 18-37.
- Houtman, L**, D Cuomo, M Dennehy, M Forman, A Zea, and S Hannan. 2025. The Harm Mapping Project: Navigating Ethics and Collaboration in Map Design. *Cartographic Perspectives*, 105, p. 27-33.
- Song Z, RE Roth, **L Houtman**, T Prestby, A Iverson, and S Gao. 2023. Visual storytelling with maps: An empirical study on story map themes and narrative elements, visual storytelling genres and tropes, and individual audience differences. *Cartographic Perspectives*, 100, pp. 10-44.

BOOKS and TUTORIALS

- Houtman L**, G Baldrice-Franklin, and RE Roth. 2025. *Mapping for a Sustainable World: QGIS Technical Supplement*. Version 2.0 The University of Wisconsin Cartography Lab: Madison, WI. DOI: [10.5281/zenodo.5585647](https://doi.org/10.5281/zenodo.5585647)
- Roth RE, G Gartner, G Baldrice-Franklin, A Cowart, **L Houtman**, A Kagawa, M Keskin, MJ Kraak, NT Nawshin, F Ortag, B Ricker, S Schlumpf, and Z Stachoň (Editors). 2025. *Atlas of Sustainability*. Vienna, Austria: The International Cartographic Association.

Houtman L, and RE Roth, 2021. *Mapping for a Sustainable World: QGIS technical supplement*. Version 1.0 The University of Wisconsin Cartography Lab: Madison, WI. DOI: [10.5281/zenodo.5585647](https://doi.org/10.5281/zenodo.5585647)

Roth RE, CM Sack, G Baldrice-Franklin, Y Chen, R Donohue, **L Houtman**, T Prestby, R Tolochko, and N Underwood, 2020. *Web Mapping: A Workbook for Interactive Cartography and Visualization on the Open Web*. Version 1.0. University of Wisconsin Cartography Laboratory: Madison, WI. DOI: [10.5281/zenodo.4685763](https://doi.org/10.5281/zenodo.4685763)

PEER-REVIEWED CONFERENCE PROCEEDINGS

Houtman L, G Baldrice-Franklin, and RE Roth. 2026. Reintroducing a QGIS Technical Supplement for *Mapping for a Sustainable World*. *Abstracts of the ICA (Cartography and Sustainable Development Workshop)*, 11, p. 13.

Roth, RE, G Gartner, G Baldrice-Franklin, A Cowart, **L Houtman**, A Kagawa, ... & Z Stachoň. 2026. Introducing the *Atlas of Sustainability*: A case study in Actionable Cartography. *Abstracts of the ICA (Cartography and Sustainable Development Workshop)*, 11, p. 4.

Robinson, AC, **L Houtman**, D McLaughlin, and CM Grozinger, 2025. Understanding User Engagement and Revisitation for Spatial Decision Support Systems in Pollinator Ecology. *Proceedings of the AGIT Conference*, p. 5-8.

Houtman, L. 2025. Characterizing the current state of mobile thematic cartography. *Abstracts of the ICA (International Cartographic Conference)*, 10, p. 111.

Houtman, L. 2024. Future opportunities for mobile thematic map design in data journalism. *Abstracts of the ICA (European Cartographic Conference)*, 7, p. 59.

Houtman, L. 2023. At the Intersection of Mobile Thematic Cartography and Data Journalism. *Abstracts of the ICA (International Cartographic Conference)*, 6, p. 93.

Robinson AC, TJ Prestby, D McLaughlin, **L Houtman**, P Dudas, and C Grozinger. 2023. Geovisualization for Pollinator Decision Support with Beescape NexGen. *Abstracts of the ICA (International Cartographic Conference)*, 6, p. 212.

Houtman L. 2022. Mapping US Elections: An Empirical Analysis of Design Techniques. *Abstracts of the ICA (European Cartographic Conference)*, 5, p. 126.

Houtman L. and RE Roth. 2021. Introducing a QGIS Technical Supplement for *Mapping for a Sustainable World*. *Abstracts of the ICA (International Cartographic Conference)*, 3, p. 113.

Roth RE, CM Sack, G Baldrice-Franklin, Y Chen, R Donohue, **L Houtman**, T Prestby, R Tolochko, and N Underwood, 2021. Introducing Web Mapping: A Workbook for Interactive Cartography and Visualization on the Open Web. *Abstracts of the ICA (International Cartographic Conference)*, 3, p. 254.

BOOK REVIEWS

Houtman, L. 2024. Review of *The Art of Insight: How Great Visualization Designers Think*. *Cartographic Perspectives*, 104, p. 70-73.

Houtman, L. 2024. Review of Airline Maps: A Century of Art and Design. *Cartographic Perspectives*, 103, p. 99-102.

INVITED TALKS and LECTURES

Guest Lecture: “Webmapping: Overview and Resources” Spring 2026

Department of Geography, The Pennsylvania State University

Invited by Dr. Alicia Iverson for GEOG 467: Applied Cartographic Design

Invited Talk: “Techniques, challenges, and opportunities in mobile thematic map design for data journalism” Fall 2025

Department of Computing, Georgia Institute of Technology

Invited by Dr. Clio Andris for CS8803: Interactive Maps and Geovisualization

Guest Lecture: “Multivariate Maps” Fall 2025

Department of Geography, The Pennsylvania State University

Invited by Dr. Alicia Iverson for GEOG 361: Introduction to Cartography

Invited Talk: “Art, Activism, and Cartography” Fall 2025

Department of Sociology, American University

Invited by Dr. Felicia Henry for SOCY 358: Arts-Based Activism

Guest Lecture: “Multivariate Maps” Spring 2025

Department of Geography, The Pennsylvania State University

Invited by Tim Prestby for GEOG 361: Introduction to Cartography

Guest Lecture: “Election Mapping - America in Red & Blue” Fall 2023

Department of Geography, The Pennsylvania State University

Invited by Dr. Anthony Robinson for GEOG 6N: Maps and the Geospatial Revolution

Guest Lecture: “Maps and Power” Spring 2023

Department of Women, Gender, and Sexuality Studies, The Pennsylvania State University

Invited by Dr. Jill Wood for WMNST 197: Creating Safer Campuses

CONFERENCE PRESENTATIONS

Houtman, L. “What Do Young Adults Think About Mobile Thematic News Maps?” *presented at* the 46th meeting of the North American Cartographic Information Society (NACIS). October 2026. Milwaukee, Wisconsin.

Wright, M.W., **Houtman, L.** “Unmapping the Binary in the Borderlands: A Queer Cartographic Collaboration” *presented at* the Communication, Science, and Society Symposium. September 2026. University Park, Pennsylvania.

Houtman, L. “Mobile Thematic Map Design: An Analysis of Young Adult Audiences Via Creative Focus Groups” *presented at* the American Association of Geographers Annual Meeting. March 2026. San Francisco, California.

Houtman, L. “Designing Non-Binary Maps to Reimagine Borderlands” *presented at* the 45th meeting of the North American Cartographic Information Society (NACIS). October 2025. Louisville, Kentucky.

Houtman, L. “Characterizing the current state of mobile thematic cartography” *presented at* the 32nd International Cartographic Conference (ICC). August 2025. Vancouver, Canada.

Houtman, L. “No Boundaries, No Borders: Creating Non-Binary Maps” *presented at* the No Boundaries Symposium. May 2025. University Park, Pennsylvania.

Houtman, L., Wright, M.W. “An Exercise in Non-Binary Maps” *presented at* the American Association of Geographers Annual Meeting. March 2025. Detroit, Michigan.

Houtman, L. “The Challenges and Opportunities of Designing News Maps for Mobile Devices” *presented at* the Computation and Journalism Symposium. October 2024. Boston, Massachusetts.

Houtman, L. “Discussing Current Limits and Future Opportunities in Mobile Map Design” *presented at* the 44th meeting of the North American Cartographic Information Society (NACIS). October 2024. Tacoma, Washington.

Houtman, L. “Future Opportunities for Mobile Thematic Map Design in Data Journalism” *presented at* EuroCarto. September 2024. Vienna, Austria.

Houtman, L. “Using Beescape NexGen: A Pollinator Health Decision-Support Tool” *presented at* the Technologies for Agriculture and Living Systems Symposium. May 2024. University Park, Pennsylvania.

Houtman, L. “Mobile Thematic Cartography: Interviews on Design and Practice” *presented at* the American Association of Geographers Annual Meeting. April 2024. Virtual.

Houtman, L. “How Should We Design Mobile Thematic Maps” *presented at* the 43rd meeting of the North American Cartographic Information Society (NACIS). October 2023. Pittsburgh, Pennsylvania.

Houtman, L. “At the Intersection of Mobile Thematic Cartography and Data Journalism” *presented at* the 31st International Cartographic Conference (ICC). August 2023. Cape Town, South Africa.

Houtman, L. “The Challenges of Using AI to Promote Further Learning in Cartographic Education” *presented at* the Pre-Conference Workshop on Cartography and AI at the 31st International Cartographic Conference (ICC). August 2023. Stellenbosch, South Africa.

Houtman, L., Prestby, T.J., McLaughlin, D., Robinson, A.C., & Grozinger, C. “Designing Beescape NexGen: A Geovisualization Tool to Support Pollinator Health” *presented at* the American Association of Geographers Annual Meeting. March 2023. Denver, Colorado.

Houtman, L. “How Should We Design Election Maps” *presented at* the 42nd meeting of the North American Cartographic Information Society (NACIS). October 2022. Minneapolis, Minnesota.

Houtman, L. “Mapping US Elections: An Empirical Analysis of Design Techniques” *presented at* EuroCarto. September 2022. Vienna, Austria.

Houtman, L. “Mapping Presidential Elections: An Empirical Analysis of Effective Design Techniques” *presented at* the American Association of Geographers (AAG) Annual Meeting. March 2022. Virtual.

Houtman, L., Roth R.E. “Introducing a QGIS technical supplement for Mapping for a Sustainable World” *presented at* the 30th International Cartographic Conference (ICC). December 2021. Florence, Italy.

PANEL DISCUSSIONS

Co-Moderator (*with* Meghan Kelly), “Cartographies of Interdependence: Intersectional Feminist Mapping in Community Struggles” *at* the 45th meeting of the North American Cartographic Information Society (NACIS). October 2025. Louisville, Kentucky.

Panelist, “LGBTQ+ in STEM Leading the Way” *at* The Pennsylvania State University. April 2025. University Park, Pennsylvania.

Panelist, “The Future of University Cartography Labs 2: Student Experience and Creating New Spaces” *at* the American Association of Geographers Annual Meeting. April 2024. Virtual.

Panelist, “Diversity, Equity, and Inclusion II: Queer Cartography” *at* the 43rd meeting of the North American Cartographic Information Society (NACIS). October 2023. Pittsburgh, Pennsylvania.

Co-Moderator (*with* FM Kim), “Finding Queerness in GIS and Cartography” *at* the American Association of Geographers Annual Meeting. March 2023. Denver, Colorado.

WORKSHOPS and CONFERENCE SESSIONS

Co-Organizer (*with* Alicia Iverson and Felicia Henry), “Introduction to Mapping for Social Change Workshop” *at* American University. September 2026. Washington, D.C.

Co-Organizer (*with* Silas Hill), “DEI Speaker Series: Cartographies of Interdependence: Intersectional Feminist Mapping in Community Struggles” *at* the 45th meeting of the North American Cartographic Information Society (NACIS). October 2025. Louisville, Kentucky.

Co-Organizer (*with* Gareth Baldrice-Franklin), “Unmapping Workshop”, NACIS Commons *at* the 45th meeting of the North American Cartographic Information Society (NACIS). October 2025. Louisville, Kentucky.

Co-Organizer (*with* Robert E. Roth, et al.), “T/U(X)W Design Challenge” *at* the Technical University of Vienna (TU Wien). May 2025. Virtual.

Co-Organizer (*with* Gareth Baldrice-Franklin), “Critical Cartographic Processes” *at* the American Association of Geographers Annual Meeting. March 2025. Detroit, Michigan.

Co-Organizer (*with* Gareth Baldrice-Franklin), “Unmapping: Creative and Critical Cartography for All”, NACIS Commons *at* the 44th meeting of the North American Cartographic Information Society (NACIS). October 2024. Tacoma, Washington.

Co-Organizer (*with* Zhaoxu Sui), “Putting the Human back in Cartography: Designs and Practices” *at* the American Association of Geographers Annual Meeting. April 2024. Virtual.

Co-Organizer (*with* Gareth Baldrice-Franklin), “Unmapping: Creative and Critical Cartography for All”, NACIS Commons *at* the 43rd meeting of the North American Cartographic Information Society (NACIS). October 2023. Pittsburgh, Pennsylvania.

Co-Organizer (*with* FM Kim), “Finding Queerness in GIS and Cartography” *at* the American Association of Geographers Annual Meeting. March 2023. Denver, Colorado.

POSTER PRESENTATIONS

Houtman, L. “The Challenges and Constraints of Designing Mobile News Maps for Science Communication” *presented at* the Viral Movements Symposium. May 2024. University Park, Pennsylvania.

Houtman, L. “Evaluating the Use and Production of Mobile News Maps” *presented at* the Pennsylvania State University College of Earth and Mineral Sciences NSF GRFP Poster Session. October 2023. University Park, Pennsylvania.

Houtman, L. “Mapping Presidential Elections: An Empirical Analysis of Effective Design Techniques” *presented at* the 41st meeting of the North American Cartographic Information Society (NACIS). October 2021. Oklahoma City, Oklahoma.

Houtman, L. “Human Evolution in the East African Rift Valley” *presented at* the 41st meeting of the North American Cartographic Information Society (NACIS). October 2021. Oklahoma City, Oklahoma.

TEACHING EXPERIENCE

Instructor (Lecture and Lab): Cartography – Maps and Map Construction Spring 2027

Department of Geography, The Pennsylvania State University

GEOG 361 - Cartography – Maps and Map Construction

Instructor (Lecture and Lab): Maps and the Geospatial Revolution Fall 2026

Department of Geography, The Pennsylvania State University

GEOG 6N - Maps and the Geospatial Revolution

Project Mentor and Instructor: Independent Study Spring 2026

Department of Geography, The Pennsylvania State University

GEOG 494 - Research Projects in Geography

Curriculum Developer for Online Geospatial Education Fall 2024

Online Geospatial Education Program, The Pennsylvania State University

GEOG 486 - Cartography and Visualization (*with* Fritz Kessler and Marcela Suárez)

Undergraduate Teaching Intern: Interactive Cartography Fall 2021

Department of Geography, University of Wisconsin – Madison

Geography 575 - Interactive Cartography and Geovisualization (*with* Robert. E. Roth & Gareth Baldrice-Franklin)

Undergraduate Teaching Intern: Introduction to Cartography Fall 2021

Department of Geography, University of Wisconsin – Madison

Geography 370 - Introduction to Cartography (*with* Robert E. Roth & Alicia Iverson)

FELLOWSHIPS and GRANTS

\$13,000 **Interdisciplinary Approaches to Human-Environment Interaction** 2025-2027

The Pennsylvania State University Community, Science, and Society Initiative (CSSI)

Collaborator, “Mapping Against the Binary in the Mexico-US Borderlands”

\$111,000 **Graduate Research Fellowship (GRFP)** 2024-2027

National Science Foundation (NSF)

Awardee, “Evaluating the Use and Production of Mobile News Maps”

\$9,000 **Letters & Science Honors Mark Mensink Senior Honors Thesis Grant** 2021-2022

University of Wisconsin – Madison

Awardee, “Mapping Presidential Elections: An Empirical Analysis of Design Techniques”

\$4,000 **McPherson Eye Research Institute Undergraduate Research Fellowship** 2021-2022

University of Wisconsin – Madison

Awardee, “Mapping Presidential Elections: An Empirical Analysis of Design Techniques”

HONORS and SCHOLARSHIPS

\$200	Nancy Brown Geography Graduate Student Service Award <i>Penn State University, Department of Geography</i>	2026
\$700	Abler and Erickson Graduate Student Enrichment Funding Award <i>Penn State University, Department of Geography</i>	2026
\$1,000	Charles Hosler Diversity, Equity, and Inclusion Graduate Student Award <i>Penn State University, College of Earth and Mineral Sciences (EMS)</i>	2026
\$50	No Boundaries Symposium Award for Best Paper (Third Place) <i>Penn State University, Department of Geography</i>	2025
\$500	Myers Award for Excellence in Cartographic Design <i>Penn State University, Department of Geography</i>	2025
\$1,500	Doctoral Student Scholarship Award <i>Cartography and Geographic Information Society (CaGIS)</i>	2024
\$300	Master's Thesis Research Grant <i>Cartography and Mapping Speciality Group, American Association of Geographers</i>	2024
\$5,000	Penn State EMS NSF GRFP Proposal Poster Competition Award <i>Penn State College of Earth and Mineral Sciences (EMS)</i>	2023
\$5,000	Fund for Excellence in Graduate Recruitment (FEGR) <i>Penn State University</i>	2022-2023
\$100	Excellence in the Department of Geography <i>University of Wisconsin – Madison, Department of Geography</i>	2022
\$100	Achievement in in the Cartography/GIS Major <i>University of Wisconsin – Madison, Department of Geography</i>	2022
\$50	Barbara Bartz Petchenik Award for Cartographic Design (First Place) <i>University of Wisconsin – Madison, Department of Geography</i>	2021
\$1,000	Department of Geography Kohn Award <i>University of Wisconsin – Madison, Department of Geography</i>	2021
\$50	Barbara Bartz Petchenik Award for Cartographic Design (Second Place) <i>University of Wisconsin – Madison, Department of Geography</i>	2020

TRAVEL GRANTS

\$500	NACIS Student Travel Grant <i>North American Cartographic Information Society (NACIS)</i>	2025
\$1,800	Early Career Award for the International Cartographic Conference (ICC) <i>USA National Committee for the International Cartographic Association (ICA)</i>	2025
\$1,000	Young Scholars Award for the International Cartographic Conference (ICC) <i>Executive Committee of the International Cartographic Association (ICA)</i>	2025
\$1,500	Penn State Graduate Student International Travel Grant <i>Penn State Global</i>	2025
\$500	NACIS Student Travel Grant <i>North American Cartographic Information Society (NACIS)</i>	2024
\$500	NACIS Student Travel Grant <i>North American Cartographic Information Society (NACIS)</i>	2023
\$200	NACIS Diversity, Equity, and Inclusion Travel Grant <i>North American Cartographic Information Society</i>	2023

\$2,700	Early Career Award for the International Cartographic Conference (ICC) <i>USA National Committee for the International Cartographic Association (ICA)</i>	2023
\$600	Young Scholars Award for the International Cartographic Conference (ICC) <i>Executive Committee of the International Cartographic Association (ICA)</i>	2023
\$500	NACIS Student Travel Grant <i>North American Cartographic Information Society (NACIS)</i>	2022
\$2,000	Early Career Award for the International Cartographic Conference (ICC) <i>USA National Committee for the International Cartographic Association (ICA)</i>	2021

SERVICE and LEADERSHIP

Chair, NACIS Shop Initiative <i>North American Cartographic Information Society (NACIS)</i>	2025-present
Co-Moderator (with Gareth Baldrice-Franklin), Practical Cartography Day <i>North American Cartographic Information Society (NACIS)</i>	2025
NACIS Board Member <i>North American Cartographic Information Society (NACIS)</i>	2024-present
NSF GRFP Workshop Peer Mentor <i>College of Earth and Mineral Sciences (EMS), The Pennsylvania State University</i>	2024-present
Coffee Hour (Colloquium) Graduate Student Committee Member <i>Department of Geography, The Pennsylvania State University</i>	2024-present
Co-Moderator (with Nat Douglass), Practical Cartography Day <i>North American Cartographic Information Society (NACIS)</i>	2024
Justice, Equity, Diversity, and Inclusion (JEDI) Student Representative <i>American Association of Geographers (AAG)</i>	2023-present
Supporting Women in Geography (SWIG) President <i>Department of Geography, The Pennsylvania State University</i>	2023-present
Graduate Student Representative <i>Department of Geography, The Pennsylvania State University</i>	2023-2024
Supporting Women in Geography (SWIG) Board Member <i>Department of Geography, The Pennsylvania State University</i>	2022-2023
Social Media Coordinator and Board Member <i>Geography Club, University of Wisconsin-Madison</i>	2021-2022
External Relations Committee Undergraduate Student Representative <i>Department of Geography, University of Wisconsin-Madison</i>	2021-2022

JOURNAL EDITING and PEER REVIEW

Guest Editor, Cartographic Perspectives (Special Issue: Mobile and Responsive Maps)	2026-2027
Reviewer, Annals of the American Association of Geographers	2026-present
Reviewer, GeoJournal	2026-present
Reviewer, GeoHumanities	2025-present
Reviewer, The Cartographic Journal	2025-present
Reviewer, Cartographic Perspectives	2025-present
Reviewer, Cartography and Geographic Information Science	2024-present
Reviewer, International Journal of Geographical Information Science	2024-present

MEMBERSHIPS

Cartography and Geographic Information Society (CaGIS)	2024-present
American Association of Geographers (AAG)	2021-present
The Phi Beta Kappa Society (PBK)	2021-present
North American Cartographic Information Society (NACIS)	2020-present

TECHNICAL SKILLS

Web Development and Cartography

- Javascript (*including Leaflet and D3 data visualization libraries*)
- HTML/CSS
- FrontEnd web frameworks (*including Bootstrap*)
- QGIS
- Esri products (*ArcGIS JS API, ArcGIS Pro, AGOL, StoryMaps*)
- Git/GitHub

Data Visualization and Analysis

- Inkscape
- Adobe Creative Cloud (*Illustrator, Photoshop, InDesign*)
- R and RStudio
- Tableau
- Blender
- Microsoft Excel

Print Technology

- Large Format Printing (44 inch plotter)
- 3D Printing