Heather A. Swienton

San Marcos, TX – 817-999-4525 – SwientonHeather@gmail.com
Portfolio: www.GISwienton.com

EDUCATION

PhD in Geography, GPA 4.0 **Anticipated May 2026**
Texas State University, San Marcos, TX
Dissertation Title: *What is a Map According to Children? A Mental Map Experiment*
Advisor*: Dr. Alberto Giordano*

MS in Geography, GPA 4.0 **Dec. 2021**
Texas State University, San Marcos, TX
Thesis Title: *Children's Cartography: What is a Map According to Children?*
Advisor*: Dr. Alberto Giordano*

BS in Geographic Information Sciences and Technology, GPA 3.68, Honors **Dec. 2018**
Texas A&M University, College Station, TX
Concentration: *Earth Systems Analysis*
Minor: *Geology*

TEACHING EXPERIENCE

Instructor of Record for 'Maps and Mapmaking' **Aug. 2023 - May 2025**
Dep. of Geog. & Environ. Studies, Texas State University, GEO 3411

- Designed and delivered a semester-long introductory undergraduate cartography course focused on foundational mapping concepts, cartographic design, and map interpretation
- Assessed student learning through activities, class discussions, exams, and iterative feedback emphasizing visual communication and real-world application

Graduate Teaching Assistant for 'Advanced Cartographic Design' **Jan. 2023 - May 2023**
Dep. of Geog. & Environ. Studies, Texas State University, GEO 4411/5417

- Supported instruction in advanced map design with emphasis on atlas production and multi-map composition within Adobe Illustrator and InDesign
- Mentored undergraduate and graduate students in refining layout, visual hierarchy, and design decision-making during lab sessions

Graduate Teaching Assistant for 'Maps and Mapmaking' **Jan. 2022 - Dec. 2022**
Dep. of Geog. & Environ. Studies, Texas State University, GEO 3411

- Facilitated lab instruction on foundational cartographic techniques, including GIS workflows and design software
- Provided individualized guidance to develop students' technical proficiency and confidence in map production across in-person and virtual formats

Graduate Teaching Assistant for 'Historical Geology' **Aug. 2019 - Dec. 2021**
Dep. of Geog. & Environ. Studies, Texas State University, GEOL 1420

- Led laboratory instruction emphasizing interpretation of geological materials and processes for introductory students
- Identified and addressed common misconceptions to support conceptual understanding and engagement with lab content

RESEARCH EXPERIENCE

Research Assistant and Data Visualization **Aug. 2022 - Dec. 2022**
Texas State University

- Funded to assist Dr. Molly Miranker in her field research in Falfurrias, Texas as a research assistant and data visualization specialist to further understand and visualize the complex process of reporting migrant deaths on the Texas/Mexico border.

Research Assistant **Aug. 2022 - Dec. 2022**
Texas State University

- Assisted Dr. Alberto Giordano by researching and contributing to related articles for Qualitative GIS research projects such as: Novel emotional, social and geographical narrative visualizations of Holocaust survivor testimonies; Mixed methods approaches to visualizing borderlands history of 18th century Lithuania and Prussia from interviews; Collaborative research pertaining to the role of cartographic design in WWII propaganda

Post-graduate Researcher **Jan. - July 2019**
Texas A&M University

- Expanded upon research from CyberHealthGIS REU furthering GIS analysis
- Conducted geoscience research with a focus on paper writing for departmental projects pertaining to data visualization and analysis of 'GeoJobs' in today's industry

CyberHealthGIS Research Experience for Undergraduates (REU) **May - Aug. 2017**
Texas A&M University

- Engaged in multidisciplinary, hands-on research in public health, geography, and GIS as 1 of 11 students chosen from across the country
- Developed strong quantitative research skills using statistical testing and GIS analysis of tornado outbreak patterns of morbidity and mortality across Texas
- Successfully presented related research (as both poster and paper) at local and international conferences, as well as publish in the Professional Geographer

CARTOGRAPHIC EXPERIENCE

Contract Cartographer, assisted Dr. Grayson Wylie **August - Sep. 2025**
Rural Health Innovators

- Designed sixteen maps displaying locations of health care areas and shortages across Texas at various scales

Contract Cartographer, hired by Dr. Aimee Villarreal **May 2023 - Dec. 2023**
Texas State University, Department of Anthropology

- Funded to create a detailed map of curated cultural areas for book publication entitled "*Sanctuaryscapes in the New Mexico Borderlands: Movements and Revivals Across the Secular-Religious Divide*" (book forthcoming 2026, University of North Carolina Press)

Research Cartographer, advised by Dr. Alberto Giordano **Aug. - Dec. 2022**
Texas State University, Dep. of Geog. & Environ. Studies

- Funded as Research Assistant to create cartographic visualizations for two Qualitative GIS research projects: visualizing the emotional, social, and geographic journeys of Holocaust survivors based on oral testimonies, and designing thematic maps as a mixed methods approach to visualizing borderlands history of 18th century Lithuania and Prussia based on interviews

PUBLICATIONS

[paper] Giordano, A., Cole, T., & **Swienton, H.** (**2026**). A novel approach to mapping place using a Holocaust survivor testimony. *Cartography and Geographic Information Science*, 53(1), 95-112.

[paper] **Swienton, H.**, Giordano, A., Hagelman, R. (**2023**). What do children draw when asked to draw a map? Results of a mental map experiment. *Cartographica: The International Journal for Geographic Information and Geovisualization, 58(3), 116-143*. https://doi.org/10.3138/cart-2022-0016

[abstract] **Swienton, H**., Giordano, A., Hagelman, R., and Maleki, S. (**2021**). Children's cartography: what is a map according to children?, *Abstracts of the International Cartographic Association*, 3, 283. https://doi.org/10.5194/ica-abs-3-283-2021, 2021.

[paper] **Swienton, H.** Thompson, C., Billman, M., Bowlick, F., Goldberg, D., Klein, A., Horney, J., and Hammond, T. (**2021**). Direct Injuries and Fatalities of Texas Tornado Outbreaks from 1973 to 2007. *The Professional Geographer*. DOI: 10.1080/00330124.2021.1871767

[abstract] **Swienton, H.,** Goldberg, D., Hammond, T., Klein, A., & Horney, J. (**2019**). Effect of Tornado Outbreaks on Morbidity and Mortality in Texas. *Prehospital and Disaster Medicine*, 34(S1), S50-S50. doi:10.1017/S1049023X19001171

[abstract] **Swienton, H.,** Goldberg, D., Hammond, T., Klein, A., & Horney, J. (**2018**). Morbidity and Mortality of Texas Tornado Outbreaks. IPRED *Abstract eBook* (p.185). http://www.ipred.co.il/wp-content/uploads/2018/01/IPRED-V-eBook.pdf

HONORS, AWARDS, FUNDING, and ACKNOWLEDGEMENTS

Dissertation Completion Fellowship Recipient **Summer 2025 - Spring 2026**
Texas State Graduate College

Awarded the Texas State Graduate College's Dissertation Completion Fellowship in May 2025 that provides funding for the 12-month fellowship period (Summer 2025 - Spring 2026) that allows the doctoral student to forego teaching and instructor roles to focus solely on the completion of their dissertation.

First Place Paper **Feb. 2025**
PANGEA Student Conference

Awarded by faculty judges in the 2025 Promoting Advancement in Nature, Geography, and Environmental Analysis (PANGEA) Graduate Student Paper Competition for paper presentation on Children's Perspectives in Cartography: A Mental Map Experiment.

Acknowledged Cartographic Work **Oct. 2024**
SWAAG Regional Conference

Designed and curated a detailed map of the city of San Marcos for the 2024 Southwest Division of the American Association of Geographers (SWAAG) conference hosted by Texas State's Department of Geography and Environmental Studies.

Competition Finalist **Nov. 2023**
Texas State University's 3-Minute Thesis (3MT) Competition

Competed as 1 of 12 finalists in Texas State's hosting of the internationally known 3MT competition where graduate students present a compelling and concise oration on their graduate research to a non-specialist audience.

First Place Paper **Mar. 2023**
GESSRS Student Conference

Awarded by faculty judges in the 2023 Geography and Environment Studies Student Research Symposium (GESSRS) Graduate Student Paper Competition for paper presentation on Children's Cartography: A Mental Map Experiment.

Acknowledged Cartographic Work **Nov. 2022**

Journal: Nutrients

Designed map for publication [see Figure 2]: Myles, C. C., Vander Weil, B., Wiley, D., & Watson, B. (2022). Representations of low(er) alcohol (craft) beer in the United States. *Nutrients*, 14(23), 4952. https://doi.org/10.3390/nu14234952

Third Place Map **Nov. 2022**

Texas State University GIS Day Map Competition

Awarded by GIS Day faculty judges and participants for "Geography of the Geography Section: 5th Floor of Sterling C. Evan's Library" map.

Early Career Scholar Funding **Dec. 2021**

ICC International Conference

Awarded funding as early career scholar to participate in the 30th International Cartographic Conference (ICC 2021) from the U.S. National Committee (USNC) to the International Cartographic Association (ICA) through a National Science Foundation (NSF) grant.

First Place Poster **Nov. 2017**

Texas A&M GIS Day Poster Competition

Awarded by GIS Day event staff and participants for 'Morbidity and Mortality of Texas Tornado Outbreaks' research poster.

PRESENTATIONS

"**Cartography and Children's Maps**" **Oct. 2025**

Loyola Marymount University, Dr. Molly Miranker

Invited presentation – San Marcos, Texas (virtual)

"**Cartography and Urban Planning**" **April 2025**

Texas State University, Student Urban Planning Organization (SUPO)

Invited presentation – San Marcos, Texas

"**Children's Perspectives in Cartography: A Mental Map Experiment"** **March 2025**

Association of American Geographers (AAG)

Paper presentation – Detroit, Michigan (virtual)

"**Children's Perspectives in Cartography: A Mental Map Experiment"** **Feb. 2025**

Promoting Advancement in Nature, Geography, and Environmental Analysis (PANGEA)

Paper presentation – Texas State University, San Marcos, Texas

"**What Mapping is According to Children**" **Nov. 2023**

Texas State University 3-Minute Thesis (3MT) Competition

Presentation competition – San Marcos, Texas

"**Grad School 101**" **June 2023**

Texas State University Graduate College Shop Talk Series

Invited panelist presenter – San Marcos, Texas

"**Children's Cartography: A Mental Map Experiment"** **March 2023**

Association of American Geographers (AAG)

Paper presentation – Denver, Colorado

"**Children's Cartography: A Mental Map Experiment"** **March 2023**

Geography and Environment Studies Student Research Symposium (GESSRS)

Paper presentation – Texas State University, San Marcos, Texas

"**Children's Cartography: What is a Map According to Children?"** **Oct. 2022**
American Association of Geographers, Southwest Regional Meeting (SWAAG)
Paper presentation – Fayetteville, Arkansas (virtual)

"**GIS & Cartography in Academia"** **Sep. 2022**
4th Annual Professional GIS Conference, Alamo Area GIS (AAGIS)
Invited lightning talk presentation – San Antonio, Texas

"**Children's Cartography: What is a Map According to Children?"** **Dec. 2021**
International Cartographic Association's 30th International Cartographic Conference (ICC)
Paper presentation – Florence, Italy (virtual)

"**Direct Injuries and Fatalities of Texas Tornado Outbreaks from 1973 to 2007**" **Nov. 2020**
American Association of Geographers, Southwest Regional Meeting (SWAAG)
Paper presentation – Graduate Student Paper Award Competition (virtual)

"**Effect of Tornado Outbreaks on Morbidity and Mortality in Texas**" **May 2019**
World Association for Disaster and Emergency Medicine Congress (WADEM)
Paper presentation – Brisbane, Australia

"**Morbidity and Mortality of Texas Tornado Outbreaks**" **Jan. 2018**
5th International Preparedness and Response to Emergencies & Disasters (IPRED)
Paper presentation – Tel Aviv, Israel

"**Finding a Science/STEM Internship**" **Oct. & Nov. 2017**
Texas A&M University Career Center
Invited panelist presenter – College Station, TX

"**Morbidity and Mortality of Texas Tornado Outbreaks**" **Aug. 2017**
Texas A&M University Undergraduate Research Summer Poster Session
Poster presentation – College Station, TX

PROFESSIONAL EXPERIENCE

ConocoPhillips, Land GIS Intern **May - Aug. 2018**
Houston, TX

- Improved data management and cartography skills through utilizing ArcMap to design enterprise-wide webmaps
- Expanded core knowledge of oil and gas lease and land skills with a spatial analysis perspective
- Collaborated with and communicated across multiple departments to ensure shared vision of projects

Perot Museum of Nature and Science, Exhibits Intern **June - July 2016**
Dallas, TX

- Aided Exhibits Team with maintaining and repairing all museum exhibits
- Supported multiple museum departments by identifying and resolving exhibit issues
- Evaluated museum design and functionality to enhance visitor enjoyment and learning

UNIVERSITY DEPARTMENTAL SERVICE

Doctoral Student Representative, Graduate Forum **Fall 2024 - Spring 2025**
Texas State University

- Attend departmental faculty meetings acting as liaison between students and faculty, reporting to department chair and faculty, giving remarks on behalf of the graduate students

PhD Co-President, Graduate Forum **Fall 2023 - Spring 2024**
PhD Vice President, Graduate Forum **Fall 2022 - Spring 2023**
Texas State University

- Establish continuity, stability, and engagement in the Graduate Forum, Texas State University's GES Department's primary student organization
- Facilitate student meetings and communication between faculty, staff, and graduate students
- Work closely with co-president to ensure group works towards common goals
- Plan and facilitate Graduate Forum activities, take the leading role in volunteer activities

PhD Co-Chair, GESSRS **Fall 2022 - Spring 2023**
Committee Member, GESSRS **Fall 2019 - Spring 2022**
Texas State University

- Lead committee in organizing, planning, and conducting annual student-led one-day conference, the Geography and Environmental Studies Student Research Symposium (GESSRS, now 'PANGEA'), for students of Texas State and other local universities

Master's Student Representative, Graduate Forum **Spring 2020**
Texas State University

- Attend departmental faculty meetings acting as liaison between students and faculty, reporting to department chair and faculty, giving remarks on behalf of the graduate students

Marketing Chair, Student Geosciences' Council **Fall 2016 - Spring 2018**
Texas A&M University

- Motivate and delegate work amongst committee team members to facilitate design of organization's apparel and flyers

Historian, Geography Society **Fall 2016 - Spring 2018**
Texas A&M University

- Facilitate communication between students and professionals in the industry
- Design department-wide emails communicating society progress and events

COMMUNITY AND PROFESSIONAL SERVICE

Article Reviewer **April - May 2023**
Journal: The Geography Teacher

Map the Library: GIS Day 2022 **Nov. 2022**
San Marcos Public Library, City of San Marcos GIS Workgroup

- Assist in developing and running children's GIS Day mapping activities at San Marcos Public Library with City of San Marcos GIS professionals to curate youth education and inspiration in GIS and cartography
- Create and host mental mapping activities, visual educational displays, mapping crafts, and scavenger hunt for local children of all ages

TECHNICAL SKILLS

Mapping and Design: ArcPro Suite, Adobe Creative Cloud (InDesign, Illustrator), Inkscape
Statistical Analysis: SaTScan, JMP
Textual Analysis: AntCont, Voyant, Wmatrix
Miscellaneous: Microsoft Suite (Word, Excel, PowerPoint)

PROFESSIONAL WEB LINKS

Cartography & Research Portfolio: www.GISwienton.com
LinkedIn: https://www.linkedin.com/in/heatherswienton/
Research Gate*:* https://www.researchgate.net/profile/Heather_Swienton2
ORCID*:* https://orcid.org/0000-0002-4467-5339