

Heather A. Swienton

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EDUCATION

PhD in Geography, GPA 4.0 **Anticipated May 2025**

Texas State University, San Marcos, TX
Dissertation Topic: Children's Cartography
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

CARTOGRAPHIC EXPERIENCE

Contract Cartographer, hired by Dr. Aimee Villarreal **May 2023 - Present**

Texas State University

- Funded to create cartographic visualizations of curated cultural areas for upcoming book entitled "Sanctuariescapes in the New Mexico Borderlands: Movements and Revivals Across the Secular-Religious Divide" (book forthcoming January 2024)

Research Cartographer, advised by Dr. Alberto Giordano, Dr. Tim Cole **Aug. - Dec. 2022**

Texas State University

- Funded to create cartographic visualizations of Holocaust survivor testimonies for ongoing research for "Emotional Geographies of the Holocaust: Methods and Representations"

TEACHING EXPERIENCE

Instructor of Record for 'Maps and Mapmaking' **Aug. 2023 - Present**

Department of Geography, Texas State University, GEO 3411

- Develop and teach course material to 22 undergraduate students
- Encourage, guide, and educate students utilizing examinations, class activities, additional resources, and real-world applications of course content

Graduate Teaching Assistant for 'Advanced Cartographic Design' **Jan. 2023 - May 2023**

Department of Geography, Texas State University, GEO 4411/5417

- Strengthen and expand students' skills gained from GEO 3411 with focus on atlas design
- Provide undergraduate and master's students in lab with cartographic resources and guidance

Graduate Teaching Assistant for 'Maps and Mapmaking' **Jan. 2022 - Dec. 2022**

Department of Geography, Texas State University, GEO 3411

- Prepare, manage, and effectively communicate lab materials both in person and virtually
- Teach and strengthen students' skills and confidence in mapping software and design

Graduate Teaching Assistant for 'Historical Geology' **Aug. 2019 - Dec. 2021**

Department of Geography, Texas State University, GEOL 1420

- Strengthen, organize, and convey lab teaching materials both in person and virtually
- Predict and identify student misconceptions to guide deeper understanding of lab material

RESEARCH EXPERIENCE

Research Assistant

Aug. 2022 - Present

Texas State University

- Assist Dr. Alberto Giordano by creating cartographic visualizations for Qualitative GIS research projects as described below
- Design spatial/emotional geography narrative visualizations of Holocaust survivor testimonies; Design thematic maps as a mixed methods approach to visualizing borderlands history of 18th century Lithuania and Prussia from interviews; Conduct research pertaining to the role of cartographic design in WWII propaganda

Master's Research

Sep. 2019 - Dec. 2021

Texas State University

- Conduct qualitative and quantitative research examining cartographic design and composition of children's maps
- Work with the Meadows Center for Water and the Environment to explore and strengthen schoolchildren's understanding of cartography

Post-graduate Researcher

Jan. - July 2019

Texas A&M University

- Expand upon research from CyberHealthGIS REU furthering GIS analysis
- Conduct geoscience research with a focus on paper writing for departmental projects pertaining to data visualization, analysis of 'GeoJobs' in today's industry, etc.

CyberHealthGIS Research Experience for Undergraduates (REU)

May - Aug. 2017

Texas A&M University

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

PROFESSIONAL EXPERIENCE

ConocoPhillips, Land GIS Intern

May - Aug. 2018

Houston, TX

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

Perot Museum of Nature and Science, Exhibits Intern

June - July 2016

Dallas, TX

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

PUBLICATIONS

[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?, *Abstr. Int. Cartogr. Assoc.*, 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, and ACKNOWLEDGEMENTS

Competition Finalist, Texas State University 3-Minute Thesis (3MT) Competition Nov. 2023
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, Texas State University GESSRS Paper Competition Mar. 2023
Awarded by faculty judges in the 2023 Geography and Environment Studies Student Research Symposium (GESSRS) Student Paper Competition.

Acknowledged Cartographic Work Nov. 2022
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, Texas State University GIS Day Map Competition Nov. 2022
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 for ICC 2021 Dec. 2021
Awarded funding as an 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, Texas A&M GIS Day Poster Competition Nov. 2017
Awarded by GIS Day event staff and participants for 'Morbidity and Mortality of Texas Tornado Outbreaks' research poster.

PRESENTATIONS

"Grad School 101" Texas State University Graduate College Shop Talk Series Invited panelist presenter – San Marcos, Texas	June 2023
"Children's Cartography: A Mental Map Experiment" Association of American Geographers (AAG) Paper presentation – Denver, Colorado	March 2023
"Children's Cartography: A Mental Map Experiment" Geography and Environment Studies Student Research Symposium (GESSRS) Paper presentation – Texas State University, San Marcos, Texas	March 2023
"Children's Cartography: What is a Map According to Children?" American Association of Geographers, Southwest Regional Meeting (SWAAG) Virtual paper presentation – Fayetteville, Arkansas	Oct. 2022
"GIS & Cartography in Academia" 4 th Annual Professional GIS Conference, Alamo Area GIS (AAGIS) Invited lightning talk presentation – San Antonio, Texas	Sep. 2022
"Children's Cartography: What is a Map According to Children?" International Cartographic Association's (ICA) 30 th International Cartographic Conference (ICC) Paper presentation – Florence, Italy/Virtual	Dec. 2021
"Direct Injuries and Fatalities of Texas Tornado Outbreaks from 1973 to 2007" American Association of Geographers, Southwest Regional Meeting (SWAAG) Paper presentation – Virtual, Graduate Student Paper Award Competition	Nov. 2020
"Morbidity and Mortality of Texas Tornado Outbreaks" American Association of Geographers (AAG) Poster presentation – Virtual	April 2020
"Effect of Tornado Outbreaks on Morbidity and Mortality in Texas" World Association for Disaster and Emergency Medicine Congress (WADEM) Paper presentation – Brisbane, Australia	May 2019
"Morbidity and Mortality of Texas Tornado Outbreaks" 5 th International Preparedness and Response to Emergencies & Disasters (IPRED) Paper presentation – Tel Aviv, Israel	Jan. 2018
"Finding a Science/STEM Internship" Texas A&M University Career Center Invited panelist presenter – College Station, TX	Oct. & Nov. 2017
"Morbidity and Mortality of Texas Tornado Outbreaks" Texas A&M University Undergraduate Research Summer Poster Session Poster presentation – College Station, TX	Aug. 2017

UNIVERSITY DEPARTMENTAL SERVICE

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 communication between faculty, staff, and graduate students
- Work closely with co-presidents to ensure group works towards common goals
- Plan and facilitate Graduate Forum activities, take the leading role in volunteer activities
- Preside over Graduate Forum meetings and attend faculty meetings

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), 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 2023 - Present

The Geography Teacher Journal

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

PROFESSIONAL MEMBERSHIPS

American Association of Geographers (AAG), Cartography Specialty Group, student member

TECHNICAL SKILLS

Mapping and Design: ArcPro Suite, Adobe Creative Cloud (InDesign, Illustrator), Inkscape

Statistical Analysis: SaTScan, JMP

Textual Analysis: AntCont, Voyant

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>

Web Of Science: <http://www.webofscience.com/wos/author/record/GDS-5615-2022>

TXST Department Profile: <https://www.geo.txstate.edu/people/gradassistants.html>