TIMOTHY J. PRESTBY curriculum vitae

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EDUCATION

The Pennsylvania State University

Fall 2022 -

Doctor of Philosophy, Geography

The Pennsylvania State University

Fall 2020 – Spring 2022

Master of Science, Geography

The University of Wisconsin-Madison

Fall 2016 – Spring 2020

Bachelor of Science, Honors Cartography and GIS Certificate in Environmental Studies

RESEARCH POSITIONS

Graduate Researcher Assistant Department of Geography, Penn State

Fall 2020 – Summer 2022

Advisers: Dr. Christina Grozinger, Professor of Entomology,
Dr. Anthony Robinson, Associate Professor of Geography

Undergraduate Research Assistant
 University of Wisconsin Cartography Lab, UW-Madison
 Adviser: Dr. Robert Roth, Professor of Geography

Spring 2019 – Summer 2020

Undergraduate Research Assistant
 Geospatial Data Science Lab, UW-Madison
 Adviser: Dr. Song Gao, Associate Professor of Geography

Fall 2018 – Summer 2020

PUBLICATIONS

Refereed Journal Articles

- Hart, D.A., **Prestby, T.**, & Roth, R.E. (accepted). Design and Evaluation of Coastal Web Atlases: Best Practices and Future Opportunities for Map Representation, Interaction, and Usability. *Coastal Management*.
- Song, Z., Roth, R.E., Houtman, L., **Prestby, T.**, Iverson, A., & Gao, S. (forthcoming). 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*.
- Bley, K., Caldwell, K., Kelly, M., Loyd, J., Roth, R.E., Anderson, T.M., Bonds, A., Plevin, J., Madison, D., Sims, T., Spencer, C., Archuleta, C., Ellner, Z., McDowell, T., Nestel, C., Noterman, E., Smith, N., Velednitsky, S., Underwood, N., Darlington, R., Gao, Y., George, A., Miller, L., **Prestby, T.**, & Vongkusolkit, J. (2021). A Design Challenge for Transforming Justice. *GeoHumanities*. https://doi.org/10.1080/2373566X.2021.1986100

- Robinson, A. C., Peeler, J., **Prestby, T.**, Goslee, S. C., Anton, K., & Grozinger, C. M. (2021). Beescape: Characterizing user needs for environmental decision support in beekeeping. *Ecological Informatics*. https://doi.org/10.1016/j.ecoinf.2021.101366
- Li, B., Gao, S., Liang, Y., Kang, Y., **Prestby, T.**, Gao, Y., & Xiao, R. (2020). Estimation of regional economic development indicator from transportation network analytics. *Scientific reports*, *10*(1), 1-15. https://doi.org/10.1038/s41598-020-59505-2
- **Prestby, T.**, App, J., Kang, Y., & Gao, S. (2020). Understanding neighborhood isolation through spatial interaction network analysis using location big data. *Environment and Planning A: Economy and Space*, *52*(6), 1027-1031. https://doi.org/10.1177/0308518X19891911

Book Chapters

- Roth, R.E., Sack, C.M., Baldrica-Franklin, G., Chen, Y., Donohue, R., Houtman, L., **Prestby, T.**, Tolochko, R., & Underwood, N. (2021) Web Mapping: A Workbook for Interactive Cartography and Visualization on the Open Web (Version 0.2). *University of Wisconsin Cartography Laboratory*. http://doi.org/10.5281/zenodo.4685763
- Gao, S., Li, M., Rao, J., Mai, G., **Prestby, T.**, Marks, J., & Hu, Y. (2021). Automatic urban road network extraction from massive GPS trajectories of taxis. *Handbook of Big Geospatial Data*, 261. https://doi.org/10.1007/978-3-030-55462-0_11

PRESENTATIONS

- **Prestby, T.** (2021). Characterizing Storytelling in COVID-19 Cartographic Journalism. *International Cartography Conference*. Florence, Italy: December 16.
- **Prestby, T.** (2021). Mapping Multiscale Pollinator Big Data. *Center for Pollinator Research Symposium*. State College, Pennsylvania: November 16.
- Roth, R.E., Sack, C.M., Baldrica-Franklin, G., Chen, Y., Donohue, R., Houtman, L., **Prestby, T.**, Tolochko, R., & Underwood, N. (2021). Introducing "Web Mapping: A Workbook for Interactive Cartography and Visualization on the Open Web". *North American Cartographic Information Society Annual Conference*. Oklahoma: October 14
- Hart, D.A., **Prestby, T.**, & Roth, R.E. (2021). Design and Evaluation of Coastal Web Atlases: Best Practices and Future Opportunities for Map Representation, Interaction, and Usability. *CoastGlS*. Virtual: September 16.
- Hart, D.A., **Prestby, T.**, & Roth, R.E. (2021). Enhancing the Wisconsin Coastal Atlas as a Resource to Support Adaptive Coastal Management. *International Coastal Atlas Network Steering Meeting*. Virtual: September 27
- **Prestby, T.**, Hart, D.A., & Roth, R.E. (2020). Designing Coastal Web Atlases: Best Practices and Future Directions. *Social Coast Forum.* Charleston, South Carolina: February 6.
- **Prestby, T.**, App, J., Kang, Y., & Gao, S. (2020). Visualizing Neighborhood Isolation by Spatial Interaction Network Analysis. *American Association of Geographers Annual Meeting*. Denver, Colorado: Canceled.

Prestby, T., Gao, S., Liang, Y., Kang, Y., & Li, B. (2020). Linking Traffic Volume to Economic Development Index Using Big Data and Gravity Models. *American Association of Geographers Annual Meeting*. Washington, DC: April 4.

FELLOWSHIPS, GRANTS, AND AWARDS

Fellowships

- 2022 Graduate Research Fellowship. National Science Foundation
- 2019-2020 Hilldale Undergraduate Research Fellowship. UW-Madison.

Grants

- 2021 Student Travel Grant. North American Cartographic Information Society (NACIS).
- 2021 Graduate Enrichment Grant. Department of Geography, Penn State.
- 2019 Bromley Research Travel Grant. L & S Honors Program, UW-Madison.
- 2019 Student Travel Grant. North American Cartographic Information Society (NACIS).

Awards

- 2022 William and Mary Easterling Outstanding Graduate Research Assistant Award. *Department of Geography, Penn State.*
- 2021 Young Scientist Award. International Cartographic Association.
- 2021 Early Career Scholar Award. U.S. National Committee to the International Cartographic Association.
- 2021 Geospatial Scholarship. US Geospatial Intelligence Foundation.
- 2021 Damon Anderson Memorial Scholarship. Wisconsin Land Information Association (WLIA).
- 2020 Olmstead Award for Excellence in Cartography. Department of Geography, UW-Madison.
- 2020 Student Membership Award. North American Cartographic Information Society (NACIS).
- 2020 Jerome Kohn Geographic Excellence Award. *Department of Geography, UW–Madison.*
- 2019-2020 Phi Beta Kappa. UW-Madison.
- 2018 William F. Vilas Merit Scholarship. UW-Madison.
- 2018-2020 College of Letters and Sciences Dean's List. UW-Madison.
- 2017 Community Environmental Scholar. UW-Madison.
- 2016-2020 College of Agriculture and Life Sciences Dean's List. UW-Madison

Map Awards

2021 David Woodward Award for Best Digital Map, <u>Honorable Mention</u>. *Cartography and Geographic Information Society (CaGIS)*.

2021 Arthur Robinson Award for Best Print Map, <u>Honorable Mention</u>. *Cartography and Geographic Information Society (CaGIS)*.

2019 Barbara Bartz Petchenik Cartographic Excellence Award. Department of Geography, UW-Madison.

2019 Keynote's Choice Award. Wisconsin Land Information Association (WLIA).

2019 Thematic Map Award, First Place. Wisconsin Land Information Association (WLIA).

TEACHING AND PEDAGOGY

Teaching Assistant
 Department of Geography, UW–Madison.

 Geography 575: Interactive Cartography and Visualization

Spring 2020

SERVICE

Service to Discipline

2021 – Reviewer, Cartography and Geographic Information Science (CaGIS) Journal.

Service to Department

2021 - Supporting Women in Geography (SWIG) President. Department of Geography, Penn State.

2021 – Undergraduate Research Opportunities Connection (UROC) Graduate Coordinator. *Department of Geography, Penn State.*

PROFESSIONAL EXPERIENCE

• Cartography Intern
Cartography Team, Apple Maps

May 2021 – August 2021

Web Developer
 University of Wisconsin Cartography Lab, UW-Madison

January 2019 – August 2020

STUDY ABROAD EXPERIENCE

Discover in Scandinavia (DIS)
 Copenhagen, Denmark

Summer 2019

 Wageningen University and Research (WUR) Exchange Wageningen, Netherlands Spring 2018

Summer 2016

PROFESSIONAL MEMBERSHIPS

- Association of American Geographers (AAG)
- Cartography Specialty Group of the Association of American Geographers (AAG–CSG)
- North American Cartographic Information Society (NACIS)