

# TIMOTHY J. PRESTBY *curriculum vitae*

Department of Geography  
The Pennsylvania State University  
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## EDUCATION

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**The Pennsylvania State University**  
M.S. Geography

Fall 2020 – present

**The University of Wisconsin–Madison**  
B.S. Honors in Cartography and GIS  
Certificate in Environmental Studies

Fall 2016 – Spring 2020

## RESEARCH POSITIONS

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- **Graduate Researcher Assistant**  
**Department of Geography, Penn State**  
Advisers: Dr. Christina Grozinger, Professor of Entomology,  
Dr. Anthony Robinson, Associate Professor of Geography

Fall 2020 – present

- **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

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### 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., **Prestby, T.**, Iverson, A., & Gao, S. (forthcoming). Map-based Visual Storytelling: An Empirical Study in Data Journalism. *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.**, & Vongkusolkiet, J. (forthcoming). 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., Baldrice-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](https://doi.org/10.1007/978-3-030-55462-0_11)

## PRESENTATIONS

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**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., Baldrice-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 City, 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. *CoastGIS*. 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

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### Fellowships

2019-2020 Hilldale Undergraduate Research Fellowship. *UW–Madison*.

### Grants

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

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, Honorable Mention. *Cartography and Geographic Information Society (CaGIS)*.

2021 Arthur Robinson Award for Best Print Map, Honorable Mention. *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

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- **Teaching Assistant** *Spring 2020*  
*Department of Geography, UW–Madison.*  
Geography 575: Interactive Cartography and Visualization

## SERVICE

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### 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

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- **Cartography Intern** *May 2021 – August 2021*  
*Cartography Team, Apple Maps*
- **Web Developer** *January 2019 – August 2020*  
*University of Wisconsin Cartography Lab, UW-Madison*

## STUDY ABROAD EXPERIENCE

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- **Discover in Scandinavia (DIS)** *Summer 2019*  
Copenhagen, Denmark
- **Wageningen University and Research (WUR) Exchange** *Spring 2018*  
Wageningen, Netherlands
- **UW Greenhouse Program in Nicaragua** *Summer 2016*  
Nicaragua

## PROFESSIONAL MEMBERSHIPS

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