

LORING J. THOMAS

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EDUCATION

University of California, Irvine

Ph.D in Sociology

2023

M.A. in Social Science

2020

Pitzer College

B.A. in Sociology and Computer Science

2017

ACADEMIC POSITIONS

Assistant Professor

Spring 2026 - Present

University of Colorado Boulder, Environmental Studies

Postdoctoral Research Associate

Fall 2023 – Fall 2025

Princeton University, Center for Policy Research on Energy and the Environment

AREAS OF RESEARCH INTEREST

Compound and Connected Hazards, Human Migration under Climate Change, Social Networks, Spatial Network Analysis, Human Responses to Climate Change, Migration, Mathematical Sociology, Social Movements

ARTICLES AND PEER REVIEWED CONFERENCE PAPERS

Thomas, Loring J; Christakis, Nicholas A; Garip, Filiz. (2026) "Social Networks and International Migration in Honduran Communities" *Proceedings of the National Academy of Sciences*, 123 (1) e2505818122. <https://doi.org/10.1073/pnas.2505818122>

Diessner, Elizabeth M., Thomas, Loring J., Butts, Carter T. (2024) "Production of Distinct Fibrillar, Oligomeric, and Other Aggregation States from Network Models of Multibody Interaction" *Journal of Chemical Theory and Computation*.

Thomas, Loring J.; Huang, Peng.; Iris Luo, Xiaoshuang.; Hipp, John. R.; Butts, Carter. T. (2024). "Marginal-Preserving Imputation of Three-Way Array Data in Nested Structures, with Application to Small Areal Units." *Sociological Methodology*, 54(1), 157-191.

Thomas, Loring J.; Huang, Peng; Yin, Fan; Xu, Junlan ; Almquist, Zack W.; Hipp, John R.; Butts, Carter T. (2022) "Geographical patterns of social cohesion drive disparities in early COVID infection hazard." *Proceedings of the National Academy of Sciences*, 119(12), e2121675119. <https://doi.org/10.1073/pnas.2121675119>

Thomas, Loring J.; Huang, Peng; Yin, Fan; Luo, Xiaoshuang Iris; Almquist, Zack W.; Hipp, John R.; Butts, Carter T. (2020) "Spatial Heterogeneity Can Lead to Substantial Local Variations in COVID-19 Timing and Severity." *Proceedings of the National Academy of Sciences*, 202011656. DOI: 10.1073/pnas.2011656117

WORKING PAPERS

Thomas, Loring J; Garip, Filiz; Christakis, Nicholas A. "A Network-Based Extension of the Migration Prevalence Ratio: The Migration Coverage Ratio" Working Paper.

Thomas, Loring J; Xu, Ziang; Satarifard, Vahid; Oppenheimer, Michael; Christakis, Nicholas A. "Climate Factors Associated with International and Internal Migration from Western Honduras" Working Paper.

Thomas, Loring J; Tingyin Xiao; Michael Oppenheimer. "A Network Model of South African Migration Highlights Integration Across Climate" Working Paper.

CONFERENCE PRESENTATIONS

Loring J. Thomas, Ziang Xu, Vahid Satarifard, Michael Oppenheimer, Nicholas A. Christakis. (08/2025) "Everybody Moves: Climate, Networks, and Mobility in Honduran Communities". American Sociological Association Annual Meeting (ASA)

Thomas, Loring J; Xu, Ziang; Satarifard, Vahid; Oppenheimer, Michael; Christakis, Nicholas A. (06/2025) "Networks, Climate, and Migration in Western Honduras" Annual Sunbelt Conference (INSNA).

Thomas, Loring J; Garip, Filiz; Christakis Nicholas A. (04/2025) "Social Network Ties Within Villages in Honduras Are Associated With International Migration" Population Association of America (PAA).

Thomas, Loring J; Garip, Filiz; Christakis, Nicholas A. (08/2024) "The Influence of Network Structure on International Migration in Western Honduran Communities" American Sociological Association Annual Meeting (ASA).

Thomas, Loring J; Garip, Filiz; Christakis, Nicholas A. (06/2024) "Developing the Linkage Between Migration and Social Network Structure" Annual Sunbelt Conference (INSNA).

Thomas, Loring J; Butts, Carter T. (04/2024) "Network Models with Joint Vertex and Edge dynamics for Exploring Structural Migration Pressures" Population Association of America Meeting (PAA). (Poster)

Thomas, Loring J; Butts, Carter T. (06/2023) "Models for Endogenous Participation in Social Networks" Annual Sunbelt Conference (INSNA).

Thomas, Loring J; Huang, Peng; Luo, Xiaoshuang Iris; Hipp, John R; Butts, Carter T. (8/2022) "Marginal Preserving Imputation of Three-Way Array Data in Nested Structures, with Application to Small Areal Units" 117th American Sociological Association Meeting (ASA).

Thomas, Loring J; Butts, Carter T. (8/2022) "Modelling Endogenous Vertex and Edge Dynamics using ERGM and Generalized Location Systems" Poster. 117th American Sociological Association Meeting (ASA).

Thomas, Loring J; Huang, Peng; Hipp, John R; Butts, Carter T. (7/2022) "Developing Inhomogeneous Spatial Interaction Functions for Spatial Bernoulli Graph Generation" Annual Sunbelt Conference (INSNA).

Thomas, Loring J.; Huang, Peng; Yin, Fan; Luo, Xiaoshuang Iris; Almquist, Zack W.; Hipp, John R.; Butts, Carter T. (8,2021) "Rising Floodwaters: Spatial Social Network Effects on COVID-19 Outcomes by Race and Ethnicity" 116th American Sociological Association Meeting (ASA).

Thomas, Loring J. and Butts, Carter T. (8,2020). "Models of Networks with Vertex and Edge Dynamics Containing Arbitrary Dependence" 115th American Sociological Association Meeting (ASA).

Thomas, Loring J.; Huang, Peng; Yin, Fan; Luo, Xiaoshuang Iris; Almquist, Zack W.; Hipp, John R.; Butts, Carter T. (7,2020). "Spatial Inhomogeneity and COVID-19 Spread" 40th Annual Sunbelt Network Conference (INSNA).

Thomas, Loring J. and Butts, Carter T. (8,2019). "Diurnal Patterns and Social Ecology: Throughput in Urban Spaces" 114th American Sociological Association Meeting (ASA). New York City, New York

Thomas, Loring J. and Butts, Carter T. (6,2019). "Entry and Exit Dynamics using Generalized Location Systems and TERGM" 39th Annual Sunbelt Network Conference (INSNA). Montreal, Canada

Thomas, Loring J. and Butts, Carter T. (3,2019). "Social Ecology and Social Activity: Institutionalized Predictors of Diurnal Patterns" 90th Pacific Sociological Association Conference (PSA). Oakland, California

Thomas, Loring J. and Butts, Carter T. (6,2018). "Anomalies and Social Ecology: Networks of Activation Across Space" 38th Annual Sunbelt Network Conference (INSNA). Utrecht, Netherlands

INVITED TALKS

Thomas, Loring J. (03,2024) "Climate Change and Migration: An Overview" Environmental Justice Beyond Borders Course Talk. Sterling College, Vermont (Virtual).

Thomas, Loring J. (6,2018). "Introduction to R" Invited Talk. ROCCT: Research Opportunities for Community College Teachers. Irvine, California.

AWARDS AND HONORS

Berkeley Formal Demography Workshop Participant, 2024

UCI Department of Sociology Outstanding Research Award, 2021

Center For Networks and Relational Analysis Fellow

UCI Associated Graduate Students Summer Travel Grant, Summer 2019

SERVICE EXPERIENCE

American Sociological Association Mathematical Sociology Section Council Student Member, 2023-2024

Mathematical Sociology Section Student and Early Career Mentor 2023-Present

RESEARCH EXPERIENCE

Princeton University

Postdoctoral Research Associate

Fall 2023 – Fall 2025

Design and implement research projects, conduct research activities, write and submit papers and reports.

University of California, Irvine

Graduate Research Assistant for Carter Butts

Fall 2018, Spring 2019- Spring 2023

Conduct Research on several projects, including implementing algorithms, working with data, and writing reports and papers.

Harvey Mudd College

Senior Clinic Project with Computer Science Department and Dart Neuroscience

Fall 2016- Spring 2017

Completed a team senior thesis/clinic project with collaborators from Industry. Includes experience with project management and writing technical reports.

Pitzer College

Senior Thesis Project with Sociology Department

Fall 2016 – Spring 2017

Completed an academic research project that required network analysis and the writing of an academic report

TEACHING EXPERIENCE

Princeton University

Instructor for Social Network Analysis Workshop

Spring 2025

Co-developed curriculum and implemented lessons for an undergraduate level workshop on social network Analysis.

University of California, Irvine

Teaching Assistant for Relational Event Models, Valued ERGM workshops at Sunbelt 2019

Provided assistance with software and answered participant questions while workshop was proceeding

Teaching Assistant for Dynamic Network, Valued ERGM workshops at Sunbelt 2018

Provided assistance with software and answered participant questions while workshop was proceeding

Teaching Assistant for Business Decisions and Introductory Statistics

Fall 2017 – Spring 2018

Taught discussion sections and helped students build proficiency with statistical analysis software, as well as meeting students and grading written work

Harvey Mudd College

Grader / Tutor for Introductory Computer Science

Spring 2014 – Spring 2015

Met with students to provide assistance with assignments and graded homework assignments and exams