J. BRANDON CARTER

Department of Statistics and Data Sciences \diamond University of Texas at Austin 105 E 24th St D9800, Austin, TX 78712 \diamond 509 \cdot 389 \cdot 6837 \diamond carterjb@utexas.edu

EDUCATION

The University of Texas at Austin

PhD in Statistics and Data Sciences, *Oct 2024* Advisor: Catherine Calder

Brigham Young University

MS in Statistics, April 2019 Advisor: David B. Dahl

BS in Statistics, Magna Cum Laude, April 2019 Minors: Mathematics, World Dance Speaker at College Graduation

RESEARCH INTERESTS

Methodological

Spatial and Spatio-temporal Statistics, Probabilistic Graphical Models, Bayesian Modeling and Computation

Applied

Social Science, Environmental Science

EXPERIENCE

The University of Texas at Austin

Assistant Instructor, January 2023 - May 2023

Teaching Assistant, August 2022 - December 2022

Graduate Research Assistant, August 2020 - May 2022

Brigham Young University

Research Assistant, August 2016 - April 2019

Teaching Assistant, August 2015 - April 2017

AWARDS AND HONORS

ISBA Travel Award, 2024

Keller Award for leadership, service and community building, Department of Statistics and Data Sciences, The University of Texas at Austin, 2024

Professional Development Travel Award, College of Natural Sciences, The University of Texas at Austin, 2023

SDS Excellence Fellowship, 2 year, Department of Statistics and Data Sciences, The University of Texas at Austin

Austin, TX

Provo, UT

Austin, TX

Provo, UT

Academic scholarship, full tuition, Brigham Young University, August 2015 - April 2019

Mary B. Jensen Scholarship, full tuition, Brigham Young University, August 2018 - April 2019

Viltis Scholarship, half tuition, Brigham Young University, August 2017 - April 2018

PUBLICATIONS

Submitted/Under Review

J. B. Carter and C. A. Calder (2024). Mixture of Directed Graphical Models for Discrete Spatial Random Fields. arXiv: 2406.15700 [stat.ME]

Refereed Publications

J. B. Carter, C. R. Browning, B. Boettner, N. Pinchak, and C. A. Calder (2024). Land-use filtering for nonstationary spatial prediction of collective efficacy in an urban environment. *The Annals of Applied Statistics* 18.1, pp. 794–818 [link]

D. B. Dahl, J. Andros, and J. B. Carter (2023). Cluster analysis via random partition distributions. *Statistical Analysis and Data Mining: The ASA Data Science Journal* 16.2, pp. 135–148 [link]

PRESENTATIONS

Invited Talks

Land-use Filtering for Nonstationary Spatial Prediction of Collective Efficacy in an Urban Environment CMStatistics 2022, London, UK, December 2022

Posters/Contributed Talks

Mixture of Directed Graphical Models for Discrete Spatial Random Fields JSM 2024, Portland, OR, August 2024

Mixture of Directed Graphical Models for Discrete Spatial Random Fields ISBA World Meeting 2024, Venice, IT, July 2024

Land-use Filtering for Nonstationary Spatial Prediction of Collective Efficacy in an Urban Environment JSM 2023, Toronto, CA, August 2023

Land-use Filtering for Nonstationary Spatial Prediction of Collective Efficacy in an Urban Environment ENVR 2022 Workshop, Provo, UT, October 2022

TEACHING

The University of Texas at Austin

Assistant Instructor, SDS 320E Elements of Statistics, Spring 2023

Teaching Assistant, SDS 322E Elements of Data Science, Fall 2022

SERVICE

The University of Texas at Austin

Dean's Office Graduate Council, January 2021 - present

Department Representative, Graduate Student Assembly, August 2020 - May 2022

Austin, TX

Austin, TX

PROFESSIONAL MEMBERSHIP

American Statistical Association (ASA) International Society of Bayesian Analysis (ISBA)