Jared D. Fisher, Ph.D.

2189 WVB - BYU Updated: October 29, 2024 Department of Statistics Office: 801-422-4244 701 E University Pkwy fisher@stat.byu.edu Provo, UT 84602 https://jareddf.github.io **EDUCATION** Ph.D. in Statistics 2019 Department of Information, Risk, and Operations Management McCombs School of Business University of Texas at Austin, Austin, TX Advisor: Carlos M. Carvalho M.S. in Information, Risk, and Operations Management 2017 Department of Information, Risk, and Operations Management McCombs School of Business University of Texas at Austin, Austin, TX 2014 M.S. in Statistics Department of Statistics Brigham Young University, Provo, UT Advisor: Gilbert W. Fellingham **B.S.** in Statistics 2012 Department of Statistics Brigham Young University, Provo, UT Minor: Mathematics ACADEMIC APPOINTMENTS **Brigham Young University** Assistant Professor 2021 - present University of California, Berkeley Lecturer 2019 - 2021 2019 - 2021 Postdoctoral Scholar University of Texas at Austin Lecturer 2019 Assistant Instructor 2017

Refereed Papers

PUBLICATIONS

5. Benjamin K. Dahl, Matthew J. Heaton, Richard L. Warr, **Jared D. Fisher**, Grant G. Schultz (2024). "Modeling Crash Risk on Roadway Networks using Bayesian Additive Regression Trees". *Technometrics*.

- 4. **Jared D. Fisher**, Colin Montague (2024). "Improving the Aggregation and Evaluation of NBA Mock Drafts". *Journal of Quantitative Analysis in Sports*.
- 3. **Jared D. Fisher**, David W. Puelz, Carlos M. Carvalho (2020). "Monotonic Effects of Characteristics on Returns". *Annals of Applied Statistics*.
- 2. **Jared D. Fisher**, Davide Pettenuzzo, Carlos M. Carvalho (2020). "Optimal Asset Allocation with Multivariate Bayesian Dynamic Linear Models". *Annals of Applied Statistics*.
- 1. Gilbert W. Fellingham, **Jared D. Fisher** (2018). "Predicting Home Run Production in Major League Baseball Using a Bayesian Semiparametric Model". *The American Statistician*.

Working Papers

- Jared D. Fisher, David W. Puelz, Sameer K. Deshpande. "A Bayesian Classification Trees Approach to Treatment Effect Variation with Noncompliance". On arXiv: https://arxiv.org/abs/2408.07765
 Under review.
- 1. **Jared D. Fisher**, Kyle R. McEvoy. "Bayesian Multinomial Logistic Regression for Numerous Categories". On arXiv: https://arxiv.org/abs/2208.14537

Work in Progress

- 3. "Bayesian Additive Regression Trees for Large Spatial Data" with Benjamin K. Dahl, Matthew J. Heaton, and Richard L. Warr.
- "Analyzing the Effect of NBA Head Coaches" with Andrew J. Cannon, Gilbert W. Fellingham, and Garritt L. Page.
- 1. "Predictive Capability of the Grade of Membership Model" with Elizabeth J. Patterson, H. Dennis Tolley, and James Oliphant.

Other Works

- 3. **Jared D. Fisher** and David W. Puelz (2020). Review 1 of "Firearm Purchasing and Firearm Violence in the First Months of the Coronavirus Pandemic in the United States" for *Rapid Reviews: COVID-19*. https://rapidreviewscovid19.mitpress.mit.edu/pub/3mbutnjm/release/2
- 2. **Jared D. Fisher** (2019). Balancing Model Structure and Flexibility in Forecasting Financial Time Series. Dissertation. https://repositories.lib.utexas.edu/handle/2152/75030
- 1. Student contributor to the labs for "Foundations of Applied Mathematics" curriculum, under Jeffrey Humpherys (2013). https://foundations-of-applied-mathematics.github.io/

Presentations

External Presentations

- Joint Statistical Meetings, Portland, Oregon

 "Improving the Aggregation and Evaluation of NBA Mock Drafts"

 August 2024
- International Society for Bayesian Analysis World Meeting, Venice, Italy

 "A Bayesian Classification Trees Approach to Treatment Effect Variation with Noncompliance"
- American Causal Inference Conference, Seattle, Washington May 2024 "A Bayesian Classification Trees Approach to Treatment Effect Variation with Noncompliance" - Poster

• Division of Biostatistics, University of Utah, Salt Lake City, Utah December 2023 "A Bayesian Classification Trees Approach to Treatment Effect Variation with Noncompliance" • ASA Utah Chapter Annual Meeting, Salt Lake City, Utah October 2023 "From Classroom to Career: Excelling in Statistics and Data Science" - Panelist • Joint Statistical Meetings, Toronto, Canada August 2023 "Aggregating Forecasts of Ranked Lists: What Information do Mock Drafts Provide about the Actual National Basketball Association Draft?" - Poster • American Causal Inference Conference, Austin, Texas May 2023 "A Bayesian Semiparametric Approach to Treatment Effect Variation with Noncompliance" - Poster • Joint Statistical Meetings, Washington DC August 2022 "A Bayesian Semiparametric Approach to Treatment Effect Variation with Noncompliance" • International Society for Bayesian Analysis World Meeting, Montreal, Canada July 2022 "A Bayesian Semiparametric Approach to Treatment Effect Variation with Noncompliance" - Poster • Causal Inference Seminar, Salem Center for Policy, Austin, TX March 2022 "A Bayesian Semiparametric Approach to Treatment Effect Variation with Noncompliance" • Department of Statistics, Brigham Young University, (online) February 2021 "A Bayesian Semiparametric Approach to Treatment Effect Variation with Noncompliance" • BYU Mathematical Finance Club, (online) November 2020 "Monotonic Effects of Characteristics on Returns" • Seminar on Bayesian Inference in Econometrics and Statistics, (online) August 2020 "Optimal Asset Allocation with Multivariate Bayesian Dynamic Linear Models" • Federal Reserve Bank, Atlanta, GA March 2019 "Monotonic Effects of Characteristics on Returns" • Department of Statistics, Brigham Young University, Provo, UT November 2018 "Monotonic Effects of Characteristics on Returns" • European Seminar on Bayesian Econometrics, New Orleans, LA October 2018 "Monotonic Effects of Characteristics on Returns" • Joint Statistical Meetings, Vancouver, BC, Canada July 2018 "Monotonic Effects of Characteristics on Returns" • International Society for Bayesian Analysis World Meeting, Edinburgh, UK June 2018 "Monotonic Effects of Characteristics on Returns" • Seminar on Bayesian Inference in Econometrics and Statistics, Stanford, CA May 2018 "Monotonic Effects of Characteristics on Returns" • INFORMS Annual Meeting, Houston, TX October 2017 "Bayesian Dynamic Linear Models for Strategic Asset Allocation" • INFORMS Advances in Decision Analysis, Austin, TX June 2017 "Bayesian Dynamic Linear Models for Strategic Asset Allocation" • Seminar on Bayesian Inference in Econometrics and Statistics, St. Louis, MO May 2017

"Bayesian Dynamic Linear Models for Strategic Asset Allocation"

- Joint Statistical Meetings, Chicago, IL

 "Bayesian Dynamic Linear Models for Strategic Asset Allocation"

 August 2016
- New England Symposium for Statistics in Sports, Cambridge, MA September 2011 "Clustering Performance Curves" Poster

Local Presentations

- IDEA Labs, Brigham Young University, Provo, UT

 "A Bayesian Semiparametric Approach to Treatment Effect Variation with Noncompliance"
- Department of Statistics, Brigham Young University, Provo, UT

 "A Bayesian Semiparametric Approach to Treatment Effect Variation with Noncompliance"
- Causal Inference Reading Group, Berkeley, CA (online) February 2021 "A Bayesian Semiparametric Approach to Treatment Effect Variation with Noncompliance"
- Sports Analytics Group at Berkeley, (online)

 "Predicting Home Run Production in Major League Baseball Using a Bayesian Semiparametric Model"
- Causal Inference Reading Group, Berkeley, CA February 2020 "Bayesian Machine Learning for Estimating Heterogeneous Treatment Effects"
- IROM Brownbag, Austin, TX September 2018 "Improving Predictions in Finance with Dynamic Bayesian Methods"
- IROM PhD Symposium, Austin, TX

 "Monotonic Effects of Characteristics on Returns"

 April 2018
- IROM PhD Seminar, Austin, TX
 "Bayesian Dynamic Linear Models for Strategic Asset Allocation"

 September 2017
- IROM PhD Seminar, Austin, TX September 2016 "Bayesian Dynamic Linear Models for Strategic Asset Allocation"
- IROM PhD Seminar, Austin, TX March 2016 "Bayesian Dynamic Linear Models for Strategic Asset Allocation"
- BYU CPMS Student Research Conference, Provo, UT

 "Modeling Functional Data; Batting Performance of Major League Baseball Players"

 March 2013
- BYU CPMS Spring Research Conference, Provo, UT March 2012 "Modeling Functional Data; Batting Performance of Major League Baseball Players"
- BYU CPMS Spring Research Conference, Provo, UT

 "Parametric Bayesian Fitting of Cubic Splines to Model Major League Baseball Player Performance"

TEACHING EXPERIENCE

Brigham Young University

- as Faculty
 - STAT 340 Probability and Inference 2 (BS). Wi 2022, Wi 2023, Wi 2024
 - STAT 497R Basketball Analytics Research Lab. Fa 2024

- STAT 536 Statistical Learning and Data Mining (MS). Fa 2021, Wi 2023, Fa 2023, Fa 2024
- as Teaching Assistant
 - STAT 635 Mixed Model Methods (MS). Wi 2014
 - STAT 340 Inference (BS). Fa 2012, Wi 2013, Fa 2013, Wi 2014
 - STAT 624 Statistical Computation (MS). Fa 2013
 - STAT 221 Principles of Statistics (BS). Fa 2009, Wi 2010
- as Bilingual Tutor
 - STAT 424 Capstone on SAS and SQL (BS). Wi 2011

University of California, Berkeley

- as Faculty (Lecturer)
 - STAT 153 Introduction to Time Series (BS). Fa 2019, Sp 2020, Fa 2020, Sp 2021

University of Texas at Austin

- as Lecturer (instructor, after graduation)
 - STA s380.17 Predictive Modeling (MS Business Analytics). Su 2019
- as Assistant Instructor (instructor, before graduation)
 - STA 309 Elementary Business Statistics (BS). Fa 2017
- as Teaching Assistant
 - STA s380.17 Predictive Modeling (MS Business Analytics). Su 2016, Su 2017, Su 2018
 - STA 371G Statistics and Modeling (BS). Sp 2016, Fa 2016, Sp 2017, Sp 2018
 - B A 386T Statistics (EMBA). Fa 2015, Fa 2018
 - STA 380.10 Mathematical Statistics for Applications (MS/PhD). Fa 2015

STUDENT ADVISING

• as MS Committee Chair

Graduated	Student	After University
2024	Elizabeth Patterson	Biostatistician at Univ. of Utah Medical
2024	Andrew Cannon	Iowa State Statistics PhD program

• as MS Committee Member

Graduated	Student	After University
2025	Jason Cook	-Not yet graduated-
2024	Benjamin Dahl	Duke Statistics PhD program
2023	Max Smith	Data Analyst at Progressive Leasing
2022	Skyler Gray	Sandia National Lab
2022	Jacob Andros	Texas A&M Statistics PhD program

• as Research Mentor

Worked With	Student
2024 - present	Devan Gwynn
2024 - present	Caleb Carlyle
2024 - present	Tyler Barlow
2023 - present	Brady Heinig
2023 - 2024	Matthew Ng
2023 - 2024	Matthew Blackley
2021 - 2022	Andrew Cannon
2020 - 2021	Richard Yu
2020 - 2021	Kyle McEvoy
2020 - 2020	Liam Shaw

SERVICE

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BYU Statistics Student Outreach Committee	2023 - present
• BYU Statistics Graduate Admissions Committee	2023 - present
• BYU CPMS Student Research Conference Session Judge	2022 - present
• BYU Statistics Graduate Comprehensive Exam Committee	2021 - present
• BYU Sports Analytics Reading Group Organizer	2023 - 2024
• BYU Statistics Department Curriculum Committee	2022 - 2025
• BYU Statistics Department Seminar Co-coordinator	2021 - 2022
UT Austin IROM PhD Seminar Organizer	2017 - 2017

to Profession

- Associate Editor, Journal of Quantitative Analysis in Sports
 Secretary, ISBA Section on Economics, Finance, and Business (EFaB)
 2023 present
- Student Paper Awards Committee, ASA Business and Economics Statistics Section 2021 present

Reviewer for

- Journal of Business and Economic Statistics
- Journal of Computational and Graphical Statistics
- Journal of Quantitative Analysis in Sports
- Journal of the Royal Statistical Society: Series C
- NeurIPS
- National Science Foundation (NSF) Grant Proposal
- Statistics in Medicine
- Rapid Review: COVID-19

Grants

- "AI-Assisted Decision-making for Stochastic Spatial Tasks with Imperfect Execution". (2024) National Science Foundation. Co-PI. *Not funded*.
- "Bayesian Non-parametric Modeling of Functional Data". (2011) BYU Office of Research, Creative Activities ORCA Grant. Funded.

AWARDS & HONORS

• Nominee, Extraordinary Teaching in Extraordinary Times Award (UC Ber	rkeley) 2020 - 2021
• ISBA EFaB Junior Researcher Travel Award (ESOBE)	2018
• Graduate School Continuing Fellowship (UT Austin)	2018 - 2019
• Dean's Fellowship (UT Austin)	2015 - 2019
• William Powers, Jr. Graduate Recruitment Fellowship (UT Austin)	2014 - 2015
• Best Session Presentation, BYU CPMS Student Research Conference	2013
• BYU President's Leadership Council's Mentored Student Group Member	2011 - 2014
• Together for Greatness Tuition Scholarship (BYU)	2011 - 2012
• BYU Department of Statistics Scholarship	2010
• BYU Undergraduate Tuition Scholarship	2006 - 2007, 2009 - 2012
• Eagle Scout	2003

Memberships

American Statistical Association (ASA)

- Business and Economic Statistics Section
- Section on Bayesian Statistical Science
- Statistics in Sports Section

International Society for Bayesian Analysis (ISBA)

• Section on Economics, Finance, and Business

Society for Causal Inference (SCI)

LANGUAGES

English - native

Mandarin Chinese - tested HSK level 4 in 2010

Industry Experience Integra REC, Austin, TX2015 Analyst Intern $\mathbf{Vivint},\,\mathrm{Provo},\,\mathrm{UT}$ 2014Business Analytics Intern ActiveCare, Provo, UT 2013 Statistical Consultant VolleyMetrics, Provo, UT 2013 Research Associate Savvysherpa, Provo, UT 2012 Research Intern