Jared D. Fisher, Ph.D.

2189 WVB - BYU
Department of Statistics
701 E University Pkwy
Provo, UT 84602

Updated: April 6, 2024
Office: 801-422-4244
fisher@stat.byu.edu
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

M.S. in Statistics 2014
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
Postdoctoral Scholar 2019 - 2021

University of Texas at Austin
Lecturer 2019
Assistant Instructor 2017

PUBLICATIONS

Refereed Papers

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 and **Jared D. Fisher** (2018). Predicting Home Run Production in Major League Baseball Using a Bayesian Semiparametric Model. *The American Statistician.*

Work in Progress

7. "Improving the Aggregation and Evaluation of NBA Mock Drafts"
   with Colin Montague. *Revise/resubmit.* On arXiv: https://arxiv.org/abs/2310.16813

6. "Modeling Crash Risk on Roadway Networks using Bayesian Additive Regression Trees"
   with Benjamin Dahl, Matthew J. Heaton, Richard L. Warr, and Grant G. Schultz. *Under review.*

5. "A Bayesian Classification Trees Approach to Treatment Effect Variation with Noncompliance"
   with David W. Puelz, Sameer K. Deshpande, et al.

4. "Bayesian Additive Regression Trees for Large Spatial Data"
   with Benjamin Dahl, Matthew J. Heaton, and Richard L. Warr.

3. "Bayesian Multinomial Logistic Regression for Numerous Categories"
   with Kyle McEvoy. On arXiv: https://arxiv.org/abs/2208.14537

2. "Analyzing the Effect of NBA Head Coaches"
   with Andrew Cannon, Gilbert Fellingham, and Garritt Page.

1. "Predictive Capability of the Grade of Membership Model" with Elizabeth J. Patterson, H. Dennis Tolley, Brigham R. Frandsen, 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

- 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   August 2016
  "Bayesian Dynamic Linear Models for Strategic Asset Allocation"

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

Local Presentations

- IDEA Labs, Brigham Young University, Provo, UT   September 2022
  "A Bayesian Semiparametric Approach to Treatment Effect Variation with Noncompliance"

- Department of Statistics, Brigham Young University, Provo, UT   October 2021
  "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)   April 2020
  "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   April 2018
  "Monotonic Effects of Characteristics on Returns"

- IROM PhD Seminar, Austin, TX   September 2017
  "Bayesian Dynamic Linear Models for Strategic Asset Allocation"

- 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   March 2013
  "Modeling Functional Data; Batting Performance of Major League Baseball Players"

- 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   March 2011
  "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 536 - Statistical Learning and Data Mining (MS). Fa 2021, Wi 2023, Fa 2023

- 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

Worked With	Student	My Main Role	After University
2023 - present	Brady Heinig	Research Mentor	-Not yet graduated-
2023 - present	JD Wilson	MS Committee Chair	-Not yet graduated-
2023 - present	Benjamin Dahl	MS Committee Member	Duke Statistics PhD program
2022 - present	Elizabeth Patterson	MS Committee Chair	Biostatistician at Univ. of Utah Medical
2021 - present	Andrew Cannon	MS Committee Chair	Iowa State Statistics PhD program
2022 - 2023	Max Smith	MS Committee Member	Data Analyst at Progressive Leasing
2021 - 2022	Skyler Gray	MS Committee Member	Sandia National Lab
2021 - 2022	Jacob Andros	MS Committee Member	Texas A&M Statistics PhD program
2020 - 2021	Richard Yu	Research Mentor	Analyst/Researcher
2020 - 2021	Kyle McEvoy	Research Mentor	UCLA Statistics PhD program
2020 - 2020	Liam Shaw	Research Mentor	Data Scientist at Wolverine Trading

SERVICE

to Sponsoring Institution

- BYU Sports Analytics Reading Group Organizer   2023 - present

- 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 Statistics Department Curriculum Committee   2022 - 2023

- 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   2023 - present

- 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 Computational and Graphical Statistics*

- *Journal of Business and Economic Statistics*

- *Journal of Quantitative Analysis in Sports*

- *Journal of the Royal Statistical Society: Series C*

- *NSF* Grant Proposal

- *NeurIPS*

- *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. *Under Review*

- "Bayesian Non-parametric Modeling of Functional Data" (2011) BYU Office of Research, Creative Activities ORCA Grant

AWARDS & HONORS

- Nominated for the Extraordinary Teaching in Extraordinary Times Award (UC Berkeley) 2020-2021

- ISBA EFaB Junior Researcher Travel Award for European Seminar for Bayesian Econometrics 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

- Junior ISBA

Society for Causal Inference (SCI)

Languages

English - native
Mandarin Chinese - tested HSK level 4 in 2010

Industry Experience

Integra REC, Austin, TX   2015
Analyst Intern

Vivint, Provo, UT   2014
Business Analytics Intern

ActiveCare, Provo, UT   2013
Statistical Consultant

VolleyMetrics, Provo, UT   2013
Research Associate

Savvysherpa, Provo, UT   2012
Research Intern