# Jared D. Fisher, Ph.D.

2189 WVB - BYU Updated: January 31, 2025 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 Dissertation: "Balancing Model Structure and Flexibility in Forecasting Financial Time Series" 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 Project: "Bayesian Semiparametric Modeling of Major League Baseball Players' Career Home Run Hitting Performance Curves" **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

2019

2017

University of Texas at Austin

Lecturer

Assistant Instructor

Note: \* indicates graduate student coauthors, while \*\* indicates undergraduate students.

## Refereed Papers

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

#### **Working Papers**

- 4. Andrew J. Cannon\*, **Jared D. Fisher**, Gilbert W. Fellingham, Garritt L. Page. "Analyzing the Effect of NBA Head Coaches".
- 3. **Jared D. Fisher**, Kyle R. McEvoy\*. "Bayesian Multinomial Logistic Regression for Numerous Categories". Link to arXiv paper.
- 2. **Jared D. Fisher**, David W. Puelz, Sameer K. Deshpande. "A Bayesian Classification Trees Approach to Treatment Effect Variation with Noncompliance". Link to arXiv paper.
- 1. Caleb Carlyle\*\*, **Jared D. Fisher**, Garritt L. Page, Gilbert W. Fellingham. "Postseason Risers and Fallers: Investigating Performance Differences in NBA Players".

#### Work in Progress

- 5. "Determining Overplayed and Underplayed NBA lineups" with Devan Gwynn\*\*, Gilbert W. Fellingham, Garritt L. Page.
- 4. "Hierarchical Plackett-Luce Models for the NBA Draft" with Brady Heinig\*\*.
- 3. "Incorporating Fatigue in NBA Adjusted Plus-Minus" with Tyler Barlow\*\*, Nathan Sandholtz.
- 2. "Predictive Capability of the Grade of Membership Model" with Elizabeth J. Patterson\*, H. Dennis Tolley, James Oliphant.
- 1. "Bayesian Additive Regression Trees for Large Spatial Data" with Benjamin K. Dahl\*, Matthew J. Heaton, Richard L. Warr.

#### 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

#### **Invited Presentations**

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

  "A Bayesian Classification Trees Approach to Treatment Effect Variation with Noncompliance"
- 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

  "From Classroom to Career: Excelling in Statistics and Data Science" Panelist
- 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)

  "Monotonic Effects of Characteristics on Returns"

  November 2020
- Federal Reserve Bank, Atlanta, GA

  "Monotonic Effects of Characteristics on Returns"

  March 2019
- Department of Statistics, Brigham Young University, Provo, UT

  "Monotonic Effects of Characteristics on Returns"

  November 2018

# Contributed Presentations

- Joint Statistical Meetings, Portland, Oregon

  "Improving the Aggregation and Evaluation of NBA Mock Drafts"

  August 2024
- American Causal Inference Conference, Seattle, Washington
   "A Bayesian Classification Trees Approach to Treatment Effect Variation with Noncompliance" Poster
- 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 "A Bayesian Semiparametric Approach to Treatment Effect Variation with Noncompliance" - Poster • Seminar on Bayesian Inference in Econometrics and Statistics, (online) August 2020 "Optimal Asset Allocation with Multivariate Bayesian Dynamic Linear Models" • 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

  "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"
- Sports Analytics Group at Berkeley, Berkeley, CA (online)

  "Predicting Home Run Production in Major League Baseball Using a Bayesian Semiparametric Model"
- 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
  "Bayesian Dynamic Linear Models for Strategic Asset Allocation"
- September 2016

• IROM PhD Seminar, Austin, TX "Bayesian Dynamic Linear Models for Strategic Asset Allocation"

- March 2016
- 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

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

  March 2012
- 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, Wi 2025
  - STAT 497R Introduction to Research (BS). Fa 2024, Wi 2025
  - STAT 536 Statistical Learning and Data Mining (MS). Fa 2021, Wi 2023, Fa 2023, Fa 2024
- as Teaching Assistant
  - STAT 221 Principles of Statistics (BS). Fa 2009, Wi 2010
  - STAT 340 Inference (BS). Fa 2012, Wi 2013, Fa 2013, Wi 2014
  - STAT 624 Statistical Computation (MS). Fa 2013
  - STAT 635 Mixed Model Methods (MS). Wi 2014
- 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 371G Statistics and Modeling (BS). Sp 2016, Fa 2016, Sp 2017, Sp 2018
  - STA 380.10 Mathematical Statistics for Applications (MS/PhD). Fa 2015
  - STA s380.17 Predictive Modeling (MS Business Analytics). Su 2016, Su 2017, Su 2018
  - B A 386T Statistics (EMBA). Fa 2015, Fa 2018

#### as MS Committee Chair

• Elizabeth Patterson 2022 - 2024

Project Title: "Comparing Computational Strategies and Evaluating the Predictive Capability of the Grade of Membership Model"

After Graduation: Biostatistician at University of Utah Medical School

• Andrew Cannon 2022 - 2024

Project Title: "Analyzing the Effects of NBA Head Coaches" After Graduation: Iowa State Statistics PhD program

## as MS Committee Member

• Jason Cook 2023 - 2025

Project Title: "Bayesian Partition Estimation for Big Data using Splinters" After Graduation: -Not yet graduated-

• Benjamin Dahl 2022 - 2024

Project Title: "Modeling Crash Risk on Roadway Networks using Bayesian Regression Trees" After Graduation: Duke Statistics PhD program

• Max Smith 2021 - 2023

Project Title: "Handling Imbalance in Credit Card Fraud Data" After Graduation: Data Analyst at Progressive Leasing

• Skyler Gray 2020 - 2022

Project Title: "Substituting Neural Networks for Gaussian Processes" After Graduation: Sandia National Lab

• Jacob Andros 2020 - 2022

Project Title: "Search Algorithms and Loss Functions for Bayesian Feature Allocation Models" After Graduation: Texas A&M Statistics PhD program

# as Research Mentor

Worked With	Student	After University
2024 - present	Devan Gwynn	-Not yet graduated-
2024 - present	Caleb Carlyle	-Not yet graduated-
2024 - present	Tyler Barlow	-Not yet graduated-
2023 - 2024	Brady Heinig	-Applying to graduate programs-
2023 - 2024	Matthew Ng	Statistical Analyst Intern at AAPC
2023 - 2024	Matthew Blackley	Texas A&M Statistics PhD program
2021 - 2022	Andrew Cannon	BYU Statistics MS program
2020 - 2021	Richard Yu	Analyst
2020 - 2021	Kyle McEvoy	UCLA Statistics PhD program
2020 - 2020	Liam Shaw	Data Scientist at Wolverine Trading

# SERVICE

to Department
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• BYU Statistics Student Outreach Committee	2023 - present
• BYU Statistics Graduate Admissions Committee	2023 - 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 Co-founder, Organizer	2017 - 2017
College	

# to

• BYU CPMS Student Research Conference Session Judge 2022 - present
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• BYU Sports Analytics Reading Group Co-founder, Organizer 2022 - 2024

# to Profession

• Associate Editor, Journal of Quantitative Analysis in Sports	2023 - present
• Secretary, ISBA Section on Economics, Finance, and Business (EFaB)	2023 - 2024

• Student Paper Awards Committee, ASA Business and Economics Statistics Section 2021 - 2024

## 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

• "Bayesian Non-parametric Modeling of Functional Data". (2011) BYU Office of Research, Creative Activities ORCA Grant. PI. \$1500. Funded.

# AWARDS & HONORS

• Nominee, Extraordinary Teaching in Extraordinary Times Award (UC Be	erkeley) 2020 - 2021
$\bullet$ 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
$\bullet$ Best Session Presentation, BYU CPMS Student Research Conference	2013
$\bullet$ BYU President's Leadership Council's Mentored Student Group Member	2011 - 2014
$\bullet$ 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
- Section on Bayesian Nonparametrics

Society for Causal Inference (SCI)

# LANGUAGES

English - native

Mandarin Chinese - tested HSK level 4 in 2010

# Industry Experience

Statistical Consultant

Integra REC, Austin, TX Analyst Intern	2015
Vivint, Provo, UT Business Analytics Intern	2014
ActiveCare, Provo, UT	2013

VolleyMetrics, Provo, UT Research Associate	2013
Savvysherpa, Provo, UT Research Intern	2012