WooJung Bae

Curriculum Vitae

Contact Information

Department of Statistics, University of Florida
117D Griffin-Floyd Hall, Gainesville, FL 32611
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Education

Aug 2018 – Present	Ph.D., Statistics, University of Florida *Advisors: Dr. Michael J. Daniels*
Mar 2016 – Feb 2018	M.A., Statistics, Yonsei University *Thesis: R Package afttest for Checking Semiparametric Accelerated Failure Time Models* *Advisors: Dr. Sangwook Kang*
Mar 2009 – Feb 2016	B.S., Mathematics and B.E., Economics (Dual Degree), Kyung Hee University

Research Experience

Graduate Intern

May 2022 – Aug 2022	Regeneron Pharmaceuticals Inc. *Under the supervision of Dr. Chenguang Wang*

Research Assistant

May 2020 – Present	Department of Statistics, University of Florida *Under the supervision of Dr. Michael Daniels*
Sep 2016 – Feb 2018	Department of Applied Statistics, Yonsei University *Under the supervision of Dr. Sangwook Kang*

Teaching Experience

Teaching Assistant

Department of Statistics, University of Florida

STA 5328	Fundamentals of Statistics
STA 5325	Fundamentals of Probability
STA 4322	Introduction to Statistics Theory
STA 4321	Introduction to Probability
STA 3032	Engineering Statistics
STA 3024	Introduction to Statistics 2
STA 2023	Introduction to Statistics 1

Department of Applied Statistics, Yonsei University

STA 3123	Sampling Theory
STA 3108	Survival Analysis
STA 1001	Introduction to Statistics

Research Interests

Bayesian Methodology, Hierarchical Modelling, Casual Inference, Longitudinal Data Models, Biostatistics, Survival Analysis, Incomplete Data Models, Building a Software

Skills

Languages & Software	R, RCPP, SAS, MATLAB, LaTeX

Working Papers

$*$: Co-first author

6. **Bae, W.**, Wang, CG and Daniels, M. Missing Data Introduced by Applying Hypothetical Strategies: Are They Really Missing?
5. **Bae, W.**, Daniels, M. and Hogan, J. Semiparametric Bayesian Inference for Causal Mediation in Cluster Randomized Trials.
4. **Bae, W.** and Daniels, M. Causal Mediation in Weight Management Trials using Bayesian Nonparametrics.
3. **Bae, W.** and Daniels, M. A More Flexible Bayesian Nonparametric Approach to Causal Mediation.
2. **Bae, W.***, Choi, D.* and Kang, S. afttest: Model Diagnostics for Semiparametric Accelerated Failure Time Models in R.
1. Choi, D.*, **Bae, W.*** and Kang, S. A More General Goodness-of-fit Tests for Semiparametric Accelerated Failure Time Models.

Software

R package

afttest Model Diagnostics for Accelerated Failure Time Models, `CRAN`, `GitHub`

Presentation

Invited Talk

Sep 2022 Missing Data Introduced by Applying Hypothetical Strategies: Are They Really Missing?, *ASA Biopharmaceutical Section Regulatory-Industry Statistics Workshop*, Washington, D.C.

Contributed Talk

Aug 2022 Causal Mediation in Weight Management Trials using Bayesian Nonparametrics, *Joint Statistical Meeting*, Washington, D.C.

Mar 2022 A More Flexible Bayesian Nonparametric Approach to Causal Mediation, *Eastern North American Region*, Houston, TX.

Dec 2021 A More Flexible Bayesian Nonparametric Approach to Causal Mediation, *US-KOREA Conference*, Los Angeles, CA.

Aug 2021 A More Flexible Bayesian Nonparametric Approach to Causal Mediation, *Joint Statistical Meeting*, Seattle, WA.

Jul 2021 A More Flexible Bayesian Nonparametric Approach to Causal Mediation, *International Society for Bayesian Analysis*, University of Connecticut, Storrs, CT.

Nov 2017 R package afttest for Checking Semiparametric Accelerated Failure Time Models afttest, *Korean Statistical Society Fall Meeting*, Seoul, Korea.

Contributed Poster

Oct 2022 Missing Data Introduced by Applying Hypothetical Strategies: Are They Really Missing?, *Southern Regional Council on Statistics*, Jekyll Island, GA.

Aug 2022 Missing Data Introduced by Applying Hypothetical Strategies: Are They Really Missing?, *Statistics in Pharmaceuticals conference*, University of Connecticut, Storrs, CT.

Jun 2022 Causal Mediation in Weight Management Trials using Bayesian Nonparametrics, *International Society for Bayesian Analysis*, Montreal, Canada.

Oct 2021 A More Flexible Bayesian Nonparametric Approach to Causal Mediation, *Southern Regional Council on Statistics*, Jekyll Island, GA.

Aug 2020 R package afttest for Checking Semiparametric Accelerated Failure Time Models afttest with an Induced Smoothing Approach, *Joint Statistical Meeting*, Philadelphia, PA.

Honors and Awards

Travel Award

Oct 2022 Boyd Harshbarger Travel Award (granted by NSF)
Southern Regional Council on Statistics

Sep 2022 College of Liberal Arts and Sciences at University of Florida
ASA Biopharmaceutical Section Regulatory-Industry Statistics Workshop, Washington, D.C.

Aug 2022 College of Liberal Arts and Sciences at University of Florida
Joint Statistical Meeting, Washington, D.C.

Jun 2022 International Society for Bayesian Analysis (granted by NSF)
International Society for Bayesian Analysis, Montreal, Canada.

Mar 2022 College of Liberal Arts and Sciences at University of Florida
Eastern North American Region, Houston, TX.

Dec 2021 UKC Fellow Award (Korean-American Scientists and Engineers Association)
US-KOREA Conference, Los Angeles, CA

Oct 2021 Boyd Harshbarger Travel Award (granted by NSF)
Southern Regional Council on Statistics

Scholarship

2017S – 2017F Internal Scholarship (Merit-based Scholarship), **Yonsei University**
2013F – 2015S Superiority Scholarship (Merit-based Scholarship), **Kyunghee University**

Assistantship

May 2020 – Present Research Assistantship, **University of Florida**
Aug 2018 – Apr 2020 Teaching Assistantship, **University of Florida**
Sep 2016 – Feb 2018 Research Assistantship, **Yonsei University**
Sep 2016 – Feb 2018 Teaching Assistantship, **Yonsei University**

Professional Memberships

2021 – Present Member, **The International Society for Bayesian Analysis**
2021 – Present Member, **Eastern North American Region**
2020 – Present Member, **American Statistical Association**
2017 – Present Member, **International Biometrics Society**

Services

Military Service

Oct 2010 – July 2012 Capital Mechanized Infantry Division, Republic of Korea Army
Served and honorably discharged from Korea Army