WooJung Bae Curriculum Vitae

Contact Information

Department of Statistics, University of Florida
117D Griffin-Floyd Hall, Gainesville, FL 32611   Email: woojung.bae@ufl.edu

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

7. **Bae, W.**, Michael G. Perri, and Daniels, M. A Bayesian Non-parametric Approach for Causal Mediation with a Post-treatment Confounder.
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.**, Michael G. Perri, 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

Jun 2023	A Bayesian non-parametric approach for causal mediation with a post-treatment confounder, *International Chinese Statistical Association Conference*, Chengdu, Sichuan, China.
May 2023	Missing data introduced by applying hypothetical strategies: are they really missing?, *Society for Clinical Trials*, Baltimore, MD.
Dec 2022	A Bayesian non-parametric approach for causal mediation with a post-treatment confounder, *Yonsei University*, Seoul, Korea.
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

Mar 2023	Semiparametric Bayesian inference for causal mediation in cluster randomized trials, *Eastern North American Region*, Nashville, TN.
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

Mar 2023	College of Liberal Arts and Sciences at University of Florida
	Eastern North American Region, Nashville, TN.
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