Bokgyeong Kang

University Park, PA, USA bxk487@psu.edu

Updated on August 17, 2023

EMPLOYMENT

Postdoctoral researcher, Duke University, USA

2023-Present

• Supervisors: Dr. Alan Gelfand, Dr. Robert Shick, and Dr. Erin Schliep

EDUCATION

Ph.D in Statistics, The Pennsylvania State University, USA

2018-2023

- · Advisors: Dr. Murali Haran and Dr. John Hughes
- Dissertation Title: Computational Methods and Spatial Models with Intractable Likelihoods

M.A. in Applied statistics, Yonsei University, South Korea

2016-2018

- · Advisor: Dr. Taeyoung Park
- Thesis Title: Flexible Modeling of Clusters in Asset Prices Using the Nested Dirichlet Process

B.A. in Business administration and Applied statistics, Yonsei University, South Korea

2009-2016

HONORS AND AWARDS

Poster Award, International Society for Bayesian Analysis (ISBA)

2022

Award for Support of Pedagogy in Graduate Instruction, The Pennsylvania State University

2021

Distinguished Graduate Fellowship, The Pennsylvania State University

Fall 2018–Spring 2019

· Graduated with High Honors, Yonsei University

2016

RESEARCH INTERESTS

Statistical computing; Markov chain Monte Carlo algorithms; spatial statistics; infectious disease modeling; statistical analysis of environmental and ecological processes

PUBLICATIONS

Manuscripts in Preparation

• **Bokgyeong Kang**, John Hughes, and Murali Haran. (2023+). "A spatio-temporal self-exciting point process for invasive food-and-mouth disease occurrence in Turkey."

Submitted Articles

- **Bokgyeong Kang**, John Hughes, and Murali Haran. (2023+). "A spatial zero-inflated Conway–Maxwell–Poisson regression model for US vaccine refusal." [Link]
- **Bokgyeong Kang**, John Hughes, and Murali Haran. (2023+). "Measuring Sample Quality in Algorithms for Intractable Normalizing Function Problems." [Link]

Published Articles

- Bokgyeong Kang, Sandra Goldlust, Elizabeth Lee, John Hughes, Shweta Bansal, and Murali Haran. (2023). "Spatial distribution and determinants of childhood vaccination refusal in the United States." *Vaccine*, 41(20) [Link]
- **Bokgyeong Kang** and Taeyoung Park. (2019). "Efficient and flexible model-based clustering of jumps in diffusion processes." *Journal of the Korean Statistical Society*. 48(3) [Link]

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PRESENTATIONS

- A spatial zero-inflated Conway–Maxwell–Poisson regression model for US vaccine refusal
 - 2023 IRSA Conference; Minneapolis, MN, USA; May 18-20, 2023
 - 2023 ENAR Spring Meeting; Nashville, TN, USA; Mar 19-22, 2023
 - 2022 ENVR Workshop; Provo, UT, USA; Oct 6-8, 2022
 - 2022 Joint Statistical Meetings; Washington, DC, USA; Aug 06–11, 2022
 - 2022 World Meeting of the International Society for Bayesian Analysis; Montreal, QC, Canada; June 26–July 01, 2022
- Diagnostics for Monte Carlo algorithms for models with intractable normalising functions
 - 2021 Joint Statistical Meetings (virtual); Aug 08-12, 2021
 - 2021 World Meeting of the International Society for Bayesian Analysis (virtual); June 28-July 02, 2021
- · Spatial distribution and determinants of childhood vaccination refusal in the United States
 - 2021 MIDAS Network Annual Meeting (virtual); May 10–13, 2021

TEACHING EXPERIENCE

The Pennsylvania State University

Graduate Instructor

MATH/STAT318 - Elementary Probability

Fall 2021, Spring 2022

Graduate Assistant

| STAT540 (Grad) - Statistical Computing | Spring 2023 |
|---|------------------------|
| STAT515 (Grad) - Stochastic Processes and Monte Carlo Methods | Spring 2021 |
| STAT416 - Stochastic Modeling | Fall 2020 |
| STAT200 - Elementary Statistics | Fall 2019, Spring 2020 |

Yonsei University

Graduate Instructor

• STA2104 - Computer Programming

Spring 2018

Graduate Assistant

| STA3126 - Mathematical Statistics I | Fall 2016, Fall 2017 |
|--------------------------------------|-----------------------------------|
| STA1001 - Introduction to Statistics | Fall 2016, Spring 2017, Fall 2017 |
| STA3124 - Stochastic Process | Spring 2017 |

VOLUNTEER EXPERIENCE

Reviewer for International Journals and Conferences

- Journal of the American Statistical Association (JASA)
- Journal of Computational and Graphical Statistics (JCGS)
- Journal of Machine Learning Research (JMLR)