# CONTACT Information

Department of Statistics and Data Science Yonsei University Daewoo Hall #401, 50 Yonsei-ro, Seoul, South Korea

Email: rinseo@yonsei.ac.kr Web: https://rinseo.github.io

## RESEARCH INTERESTS

Measuring the dynamics of public opinion for effective policy communication.

- My interests are focused on communication gaps at the intersection of **political** and **science communication**. I examine how public opinion diverges from policy actors' (political elites or scientific experts) views and the resulting unintended outcomes, regarding *public health and election issues*.
- My research employs statistical methods to adjust for biases and measurement error in observational data, including survey and text data. I am also interested in simulation experiments with applications to social and environmental research.

#### EDUCATION

Yonsei University, Seoul, South Korea

M.A. Statistics and Data Science (GPA: 4.13/4.3)

Feb 2022

- Thesis Topic: Measurement Error in Spatio-Temporal Outcomes
- Advisor: Professor Sangwook Kang

B.A. Communication, Applied Statistics (GPA: 4.22/4.3)

Feb 2020

• Summa Cum Laude, Graduated with Highest Honors

## REFEREED JOURNAL PUBLICATIONS

- [1] Park, R. & Baek, Y. M. (2021). Talking alternatively what would happen versus talking straightly what happened: Tracking Congressional speech during the COVID-19 pandemic. *Journal of Social and Political Psychology*, 9(2), XX-XX. https://doi.org/10.5964/jspp.6153 [DOI NEED TO BE ASSIGNED]
- [2] Park, R. & Baek, Y. M. (2021). Trends in survey response rates during election periods in South Korea: Two-phases of survey response model and survey modes. \*Journal of Communication Research, 58(3), 5-45. https://doi.org/10.22174/ jcr.2021.58.3.5.
- [3] Park, R. & Baek, Y. M. (2020). Early voting and the citizens' change in vote choice in Korean legislative elections: An ecological inference (EI) approach. \*Korean Party Studies Review, 19(3), 39-73. https://doi.org/10.30992/KPSR. 2020.09.19.3.39

(\*: Journals in Korean)

# Books

- [4] Baek, Y. M. & **Park**, **R**. (forthcoming). Complex survey data analysis using R. Seoul: Hannarae Publishing Co.
- [5] Baek, Y. M. & Park, R. (2021). Missing data analysis using R: Maximum likelihood and multiple imputation. Seoul: Hannarae Publishing Co.
- [6] Baek, Y. M. & Park, R. (2021). Propensity score analysis using R: Causal inference based on the Rubin's Causal model. Seoul: Hannarae Publishing Co.

### Works In Progress

- [7] Park, R. & Kang, S. A measurement error approach for satellite-based air quality modeling: Using GEMS-retrieved nitrogen dioxide (NO<sub>2</sub>) products.
  - Best paper award: Presented at the BK21 Conference for Statistics and Data Science, Yonsei University, Seoul, South Korea, October 15, 2021.

- [8] Park, R. & Song, H. We don't need THAT vaccine: An agent-based modeling of vaccine uptake and resistance with two vaccines.
  - Presented at the World Congress for Korean Politics and Society 2021, Seoul, South Korea, August 18-20, 2021.
- [9] **Park**, **R.** & Baek, Y. M. Evaluating the effectiveness of parental mediation on children's media use: Propensity score matching with complex survey data.
  - Presented at 6th Annual Korea Press Foundation Conference Using the KPF Media Statistics Data, Seoul, South Korea, November 27, 2021.

## RESEARCH EXPERIENCES

## National Institute of Environmental Research (NIER)

(Supervisor: Professor Sangwook Kang)

Research Assistant

Apr 2020 - Dec 2021

- Developed geostatistical algorithms for **GEMS**, satellite-based air quality data, and conducted simulation studies using kriging and Gaussian random fields
- Managed a Linux-based RStudio server for computing over 1TB of data
- Appointed by Professor Kang to lead the team of 7 research assistants in 2021

## Korea Press Foundation (KPF)

(Supervisor: Professor Young Min Baek)

Researcher

Jul 2021 - Sep 2021

• Examined the effects of parental mediation on children's media use employing causal inference methods in the *Child and Media Korea 2020* survey

### Ministry of Foreign Affairs (MOFA), Republic of Korea

(Supervisor: Professor Young Min Baek)

Research Assistant

Apr 2020 - Aug 2020

• Tracked topic changes over two decades in the US elite discourse (Congressional records and NYT/WP's news articles) toward the Korean peninsula

#### Gwangju National University of Education

(Supervisor: Professor Young Min Baek)

Researcher

Mar 2020 - Apr 2020

• Built an interactive web application for Korean text analytics using R Shiny

#### NAVER News Algorithm Review Board

(Supervisor: Professor Kyungmo Kim)

 $Under graduate\ Research\ Assistant$ 

Feb 2017 - May 2017

• Collected news articles about the 2017 South Korean presidential election to assess the political neutrality of NAVER's news selection and placement algorithms

### TEACHING EXPERIENCES

#### Department of Applied Statistics, Yonsei University

(Lecturer: Professor Sangwook Kang)

Teaching Assistant

Fall 2020 - Spring 2021

- STA3123: Survey Sampling, Spring 2021 (Taught in English, SAS software)
- STA3108: Survival Analysis, Fall 2020 (Taught in English, R software)

Internship NAVER Corporation, Seongnam, South Korea

Research Intern Jan 2020 - Feb 2020

• Proposed a novel approach to visualize the evolution of buzzwords at Data Lab

Leadership Yonsei Big Data Club (YBIGTA)

(Advisor: Professor Won Suk Lee)

13th Vice President

Jul 2018 - Jun 2019

 Managed the 60-member club's weekly sessions and semestral conference about data science topics from machine/deep learning to cloud computing

Honors and Awards Yonsei University

Best Paper Award, BK21 Conference for Statistics and Data Science
Graduated with Highest Honors (Top 1% of the graduating class)
Excellence Prize, Embrain Panel Big Data Competition
May 2019

**NAVER** Corporation

• Excellence Prize, Data Science Competition 2019 Aug 2019

SCHOLARSHIPS

National Research Foundation of Korea (NRF)

• Brain Korea 21 (BK21) Scholarship (\$600 per month) **2020 - 2021** 

Yonsei University

Bachelor's-Master's Bridge Program Scholarship (full tuition)
Honors Scholarship (7 consecutive semesters)
2020 - 2021
2016 - 2019

Samsung Foundation

• Samsung Dream Class Scholarship Summer 2017

TECHNICAL STRENGTHS Programming / Markup Cloud Computing / OS R, Python, SAS, NetLogo / LATEX, HTML, CSS GCP, AWS, Docker / Windows, Linux, mac OS

References

Professor Sangwook Kang (kanggil@yonsei.ac.kr)

• Associate Professor, Department of Statistics and Data Science, Yonsei University

Professor Young Min Baek (ymbaek@yonsei.ac.kr)

• Associate Professor, Department of Communication, Yonsei University

Professor Hyunjin Song (hyunjinsong@yonsei.ac.kr)

• Assistant Professor, Department of Communication, Yonsei University

Professor Jongho Im (ijh38@yonsei.ac.kr)

• Associate Professor, Department of Statistics and Data Science, Yonsei University

Professor Hakbae Lee (hblee@yonsei.ac.kr)

• Professor, Department of Statistics and Data Science, Yonsei University

MORE Information Supplementary materials can be found at my website, https://rinseo.github.io. The online version of this document contains active hyperlinks.

Last Modified: November 26, 2021