EDUCATION

Stanford University, Palo Alto, CA, USA

Ph.D. in Communication

2022 - Present

Yonsei University, Seoul, South Korea

M.A. in Statistics and Data Science

2020 - 2022

B.A. in Communication, Applied Statistics (summa cum laude)

2016 - 2020

JOURNAL PUBLICATIONS

- [1] Park, R. & Baek, Y. M. (2021). *Evaluating the effectiveness of parental mediation on children's media use: Propensity score matching with complex survey data. Korean Journal of Journalism & Communication Studies, 65(6), 5-46.
- [2] 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), 608-622.
- [3] 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.
- [4] 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.

(*: Published in Korean journals)

BOOKS

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

Conference Papers

- [8] Park, R. & Song, H. We don't need THAT vaccine: An agent-based modeling of vaccine uptake and resistance dynamics with heterogeneous vaccination options.
 - Presented at the 72nd Annual ICA Conference, Paris, 26-30 May 2022.
- [9] Park, R. & Kang, S. A measurement error approach for satellite-based air quality modeling: Using GEMS-retrieved nitrogen dioxide (NO₂) products.
 - Awarded Best Master's Paper: Presented at the BK21 Conference for Statistics and Data Science, Seoul, South Korea, 15 October 2021.

RESEARCH EXPERIENCE

National Institute of Environmental Research, Incheon, South Korea

Research Assistant

Apr 2020 - Dec 2021

- Developed geostatistical algorithms for air quality data (i.e., AOD and NO₂) obtained from satellite remote sensors (i.e., GOCI-II and GEMS)
- Conducted simulation studies using spatio-temporal statistical models including kriging and Gaussian random fields
- Managed a Linux-based RStudio server computing 1TB+ of data
- Collaborated with the 10+ teams involved in the GEMS project; led 1 team consisting of 7 research assistants

Korea Press Foundation, Seoul, South Korea

Researcher Jul 2021 - Sep 2021

• Examined the causal effects of parental mediation on children's media consumption based on data from the Child and Media Korea 2020 survey; presented new policy insights to the Korea Press Foundation

Ministry of Foreign Affairs, Seoul, South Korea

Research Assistant

Apr 2020 - Aug 2020

• Used statistical modeling to track topic shifts over two decades of political and journalistic discourse regarding US-Korea relations

Gwangju National University of Education, Gwangju, South Korea

Researcher

Mar 2020 - Apr 2020

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

NAVER News Algorithm Review Board, Seongnam, South Korea

Undergraduate Research Assistant

Feb 2017 - May 2017

 Assessed the political neutrality of news selection and visual placement on NAVER during the 2017 South Korean presidential election period

TEACHING EXPERIENCE

Yonsei University, Seoul, South Korea

Teaching Assistant

Sep 2020 - Jun 2021

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

Internship

NAVER Corporation, Seongnam, South Korea

Research Intern

Jan 2020 - Feb 2020

 Proposed a novel approach for visualizing the evolution of buzzwords as part of NAVER Data Lab

Honors and Awards

2022 - Present

47th Doctoral Study Abroad Fellowship, Korea Foundation for Advanced Studies

2020 - 2022

Best Master's Paper, BK21 Conf. for Statistics and Data Science, Yonsei University

Brain Korea 21 Scholarship, National Research Foundation of Korea

Bachelor's-Master's Bridge Program Scholarship, Yonsei University

<u>2016 - 2020</u>

Graduated with Highest Honors, Yonsei University

Honors Scholarship (\times 7), Yonsei University

Excellence Prize, Data Science Competition 2019, NAVER Corporation

Excellence Prize, Embrain Panel Big Data Competition, Yonsei University

Samsung Dream Class Scholarship, Samsung Welfare Foundation

TECHNICAL STRENGTHS

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