



Kyusoon KIM
Seoul/Korea | (+82)10-9929-8680
kyu9510@snu.ac.kr
[github](#) | [homepage](#)

EDUCATION

SEOUL NATIONAL UNIVERSITY

Sep. 2020-Current

PH.D. CANDIDATE, STATISTICS

- Advisor: Hee-Seok Oh
- GPA: 4.18 / 4.3

SEOUL NATIONAL UNIVERSITY

Mar. 2014 - Feb. 2020

B.S., STATISTICS

- GPA: 3.98 / 4.3 (total), 4.10 / 4.3 (major)

QUEEN MARY UNIVERSITY OF LONDON

Jul. 2019 - Aug. 2019

SUMMER SCHOOL STUDENT

- Course: Practical Machine Learning
- Mark: 90.9 / 100, Grade: A

GYEONGGI SCIENCE HIGH SCHOOL

Mar. 2011 - Feb. 2014

SPECIALIZED HIGH SCHOOL FOR STUDENTS TALENTED IN MATH AND SCIENCE

PUBLICATIONS

- Cho, H., **Kim, K.** and Oh, H.-S. (2024+). "Statistical graph empirical mode decomposition by graph denoising and boundary treatment," Submitted.
- **Kim, K.** and Oh, H.-S. (2023+). "Quantile-based fitting for graph signals," Submitted.
- Kang, S.[†], **Kim, K.**[†], Kwon, Y.[†], Park, S.[†], Park, S.[†], Shin, H.-Y.[†], Kim, J. and Oh, H.-S. (2023+). "Semiparametric approaches for the inference of univariate and multivariate extremes," Submitted.
- Shin, H.-Y., **Kim, K.***, Lee, K. and Oh, H.-S. (2023+). "Absolute Average and Median Treatment Effects as Causal Estimands on Metric Spaces," Under review.
- **Kim, K.** and Oh, H.-S. (2023). "Network time series forecasting using spectral graph wavelet transform," *International Journal of Forecasting*. [\[paper\]](#) [\[code\]](#)
- **Kim, K.**, Oh, H.-S. and Park, M. (2023). "Principal component analysis for river network data: Use of spatiotemporal correlation and heterogeneous covariance structure," *Environmetrics*, 34(4), e2753. [\[paper\]](#) [\[code\]](#)

*: corresponding author(s), †: equal contributions

RESEARCH AND PROFESSIONAL EXPERIENCE

RESEARCH SCIENTIST

Feb. 2020 - Jul. 2020 / Korea

SENTIENCE INC.

PARTICIPANT OF UNDERGRADUATE RESEARCH INTERNSHIP PROGRAM

Sep. 2019 - Feb. 2020 / Korea

BAYESIAN STATISTICS LAB., SEOUL NATIONAL UNIVERSITY

- Advisor: Jaeyong Lee

MILITARY SERVICE

Jul. 2017 - Apr. 2019 / Korea

R.O.K ARMED FORCES (SERGEANT)

- Served in fulfillment of the mandatory military service duty for Republic of Korea citizens
- Created and improved auto-processing software for data processing using Python

TEACHING EXPERIENCE

TEACHING ASSISTANT

SEOUL NATIONAL UNIVERSITY

- Probability Concept and Applications (326.211) / Spring 2023
- Statistical Consulting and Practices (326.517A) / Spring 2022, Fall 2022
- The World of Uncertainty and Statistics (046.003) / Fall 2021
- Probability Concept and Applications (326.211) / Spring 2021
- Statistical Computing and Lab. (326.212) / Fall 2020

LAB INSTRUCTOR

STATISTICAL RESEARCH INST., SEOUL NATIONAL UNIVERSITY

- Public lecture (Regression Analysis / Analysis of Variance) / Feb. 2023, Feb. 2024
- Public lecture (Exploratory Data Analysis / Regression Analysis / Analysis of Variance) / Aug. 2022
- Special lecture (Statistical Prediction) / Feb. 2022

AWARDS AND HONORS

OUTSTANDING RESEARCH TALENT FELLOWSHIP

Mar. 2022 - Aug. 2023

BK21 FOUR (BRAIN KOREA 21 PROGRAM FOR LEADING UNIVERSITIES & STUDENTS), SEOUL NATIONAL UNIVERSITY

BEST STUDENT PAPER PRESENTATION HONORABLE MENTION AWARD

Jul. 2023

KOREAN STATISTICAL SOCIETY CONFERENCE 2023 SUMMER

THE 2ND PLACE IN EXTREME VALUE ANALYSIS 2023 DATA COMPETITION

Jun. 2023

EXTREME VALUE ANALYSIS 2023

- Team name: SHSmultiscale
- Task: Prediction of extremal quantiles and joint probabilities of exceedance events

BEST STUDENT PAPER PRESENTATION HONORABLE MENTION AWARD

Jul. 2022

KOREAN STATISTICAL SOCIETY CONFERENCE 2022 SUMMER

EXCELLENT TEACHING ASSISTANT AWARD

Feb. 2022

FACULTY OF LIBERAL EDUCATION

- Course Title: The World of Uncertainty and Statistics

SCHOLARSHIP FOR NEXT GENERATION SCHOLARS IN FUNDAMENTAL SCIENCE

Mar. 2021 - Feb. 2022

SEOUL NATIONAL UNIVERSITY

SCHOLARSHIP FOR GRADUATE STUDENT INSTRUCTOR

Sep. 2020 - Feb. 2021

COLLEGE OF NATURAL SCIENCES, SEOUL NATIONAL UNIVERSITY

THE NATIONAL SCHOLARSHIP FOR SCIENCE AND ENGINEERING

Mar. 2014 - Aug. 2017, Sep. 2019 - Feb. 2020

KOREA STUDENT AID FOUNDATION

- All semesters during the undergraduate period

TOP 30 TEAMS IN NAVER AI VISION HACKATHON 2018

Dec. 2018 - Feb. 2019

NAVER CORP.

- Image retrieval challenge using a large dataset

ARMY CHIEF OF STAFF AWARD

Jun. 2018 - Sep. 2018

MINISTRY OF DEFENSE START-UP CHALLENGE 2018

- Developed a diary app for self-management by researching state-of-the-art NLP techniques including Deep Learning
- Advanced to K-Startup Challenge 2018

DEAN'S LIST

Jun. 2014 - Dec. 2017

COLLEGE OF NATURAL SCIENCES, SEOUL NATIONAL UNIVERSITY

- 2014 1st semester, 2014 2nd semester, 2015 1st semester, 2016 2nd semester, 2017 1st semester

BRONZE MEDAL IN COLLEGIATE MATHEMATICS COMPETITION

Nov. 2014

KOREAN MATHEMATICAL SOCIETY

SILVER MEDAL IN KOREAN MATHEMATICS OLYMPIAD

Aug. 2012

KOREAN MATHEMATICAL SOCIETY

- Placed within the top 50 candidates for the International Mathematical Olympiad

TALKS AND PRESENTATIONS

JOINT STATISTICAL MEETING 2023

Aug. 2023

TORONTO, CANADA

- Title: Network Time Series Forecasting using Spectral Graph Wavelet Transform (Contributed Session)

KOREAN STATISTICAL SOCIETY CONFERENCE 2023 SUMMER

Jun. 2023

BUSAN, KOREA

- Title: Absolute average and median treatment effects as causal estimands on metric spaces (Contributed Session)

DATA SCIENCE, STATISTICS & VISUALISATION 2022 CONFERENCE

Jun. 2022

TAINAN, TAIWAN, ROC (HYBRID)

- Title: Principal Component Analysis for River Network Data: Use of Spatio-temporal Correlation and Heterogeneous Covariance Structure (Contributed Session)

KOREAN STATISTICAL SOCIETY CONFERENCE 2022 SUMMER

Jun. 2022

SEOUL, KOREA

- Title: Principal Component Analysis for River Network Data: Use of Spatio-temporal Correlation and Heterogeneous Covariance Structure (Contributed Session)

10TH WORLD CONGRESS IN PROBABILITY AND STATISTICS

Jul. 2021

SEOUL, KOREA (VIRTUAL)

- Title: Geum River Network Data Analysis via Weighted PCA (Poster Session)

SKILLS

PROGRAMMING LANGUAGES *Experienced:* R | Python *Familiar:* SAS | C | JAVA

MACHINE LEARNING FRAMEWORKS Tensorflow | Keras | PyTorch

TYPESETTING \LaTeX | Beamer

LANGUAGES *Native:* Korean *Intermediate:* English