Junoh Heo

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https://heojunoh.github.io

Education

Michigan State University,   East Lansing, MI, U.S.A.
Ph.D. student in Statistics   2020 - May 2025 (Expected)
Advisor: Dr. Chih-Li Sung

Chung-Ang University,   Seoul, Korea
M.S. in Statistics   2018 - 2020
Advisor: Dr. Wonkuk Kim

Chung-Ang University,   Seoul, Korea
B.A. in Statistics   2013 - 2018

Research Interests

Computer experiments, uncertainty quantification, multi-fidelity simulation, bayesian optimization, and engineering statistics

Honors & Awards

Winner, ASA Student Paper Competition, Sections on Physical and Engineering Sciences (SPES) and Quality and Productivity (Q&P)   2024

JRC Student Travel Award, Joint Research Conference on Statistics in Quality, Industry, and Technology   2024

SIAM Student Travel Award, SIAM Conference on Uncertainty Quantification   2024

COGS Conference Award, Michigan State University   2023

Winner, INFORMS 2023 Quality, Statistics & Reliability Best Student Paper Competition   2023

Presidential Award, The Korean Statistical Society   2019

Best Academic Achievement Scholarship for Graduate Student, Chung-Ang University   2019

CAU Graduate Research Scholarship, Chung-Ang University   2018, 2019

Scholarship for Outstanding Academic Achievement, Chung-Ang University   2017, 2018

Publications

3. Steensma, A. K., Kaste, J. A. M., **Heo, J.**, Orr , D., Sung, C.-L., Shachar-Hill, Y., and Walker, B. J. (2024+) Modeling With Uncertainty Quantification Identifies Essential Features of a Non-Canonical Algal Carbon-Concentrating Mechanism, submitted.

2. **Heo, J.** and Sung, C.-L. (2023+) Active learning for a recursive non-additive emulator for multi-fidelity computer experiments, submitted.

   - Winner, INFORMS 2023 Quality, Statistics & Reliability Best Student Paper Competition
   - Winner, 2024 ASA SPES + Q&P Student Paper Competition

1. **Heo, J.**, Lee, J.Y. and Kim, W. (2020) Bayesian information criterion accounting for the number of covariance parameters in mixed effects models, *Communications for Statistical Applications and Methods*, 27(3), 301-311.

Talks

2024 Joint Statistical Meetings (Aug 2024). *Active learning for a recursive non-additive emulator for multi-fidelity computer experiments*

Joint Research Conference on Statistics in Quality, Industry, and Technology (Jun 2024). *Active learning for a recursive non-additive emulator for multi-fidelity computer experiments*

SIAM Conference on Uncertainty Quantification (UQ24) (Feb 2024). *Active learning for a recursive non-additive emulator for multi-fidelity computer experiments*

2023 INFORMS Annual Meeting (Oct 2023). *Active learning for a recursive non-additive emulator for multi-fidelity computer experiments*

Student Seminar, Department of Statistics and Probability, Michigan State University (Oct 2023). *Active learning for a recursive non-additive emulator for multi-fidelity computer experiments*

Advising Experience

Chungmin Lee, Undergraduate Student (Michigan State University) | 2024 -

Aditya Pendyala, Undergraduate Student (Michigan State University) | 2024 -

Teaching Experience

Instructor, Michigan State University
STT 200 Statistical Methods | 2022 Summer

Graduate Teaching Assistant, Michigan State University
STT 200 Statistical Methods | 2020F, 2021S, 2021F, 2022F, 2023S, 2023F
STT 801 Design of Experiments | 2022S
STT 864 Statistical Methods II | 2022S

Graduate Teaching Assistant, Chung-Ang University
Mathematical Statistics I | 2018S, 2019S
Mathematical Statistics II | 2018F, 2019F
Regression Analysis | 2018S, 2019S
Multivariate Statistical Analysis | 2018F, 2019F

Tutor, Chung-Ang University
Mathematical Statistics I | 2014S