

Junoh Heo

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<https://heojunoh.github.io>

Education

Michigan State University , Ph.D. student in Statistics Advisor: Dr. Chih-Li Sung	East Lansing, MI, U.S.A. 2020 - Present
Chung-Ang University , M.S. in Statistics Advisor: Dr. Wonkuk Kim	Seoul, Korea 2018 - 2020
Chung-Ang University , B.A. in Statistics	Seoul, Korea 2013 - 2018

Research Interests

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

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. (2024+) Active learning for a recursive non-additive emulator for multi-fidelity computer experiments. *Technometrics*, accepted.
 - 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.

Honors & Awards

FTC Student Travel Award , Fall Technical Conference	2024
Graduate School Travel Fellowship , Michigan State University	2024
Student and Early Career Travel Fund , American Statistical Association	2024
SPES+Q&P Travel Award , American Statistical Association's Sections on Physical and Engineering Sciences (SPES) and Quality and Productivity (Q&P)	2024
Outstanding Scholar Fellowship , Michigan State University	2024
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

Talks

International Conference on Advances in Interdisciplinary Statistics and Combinatorics 2024 (Oct 2024). *Active learning for a recursive non-additive emulator for multi-fidelity computer experiments*

2024 Fall Technical Conference (Oct 2024). *Active learning for a recursive non-additive emulator for multi-fidelity computer experiments*

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*

Mentoring

Chungmin Lee, Undergraduate Student (Yonsei University) 2024 -

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

Academic Services

Review Technometrics

Outreach 12th Annual MSU Science Festival Apr 2024

Teaching

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, 2024F
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