

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 - May 2025 (Expected)

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

Honors & Awards

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

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.

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