Kiljae Lee

Statistics Ph.D. Candidate | The Ohio State University

lee.10428@osu.edu (614) 405-3585 Website LinkedIn Google Scholar GitHub

Research Interests

Statistical machine learning, data-centric AI, explainable AI, LLM evaluation, uncertainty quantification.

Education

The Ohio State University Aug 2022–Expected May 2027
Ph.D. in Statistics GPA: 4.00/4.00
Advisor: Yuan Zhang

Korea University Mar 2020–Aug 2021
M.S. in Statistics GPA: 4.44/4.50
Advisor: Taeryon Choi. Thesis: *Fully Bayesian Semiparametric Two-stage Meta-analysis.*

Korea University Mar 2014–Feb 2020
B.S. in Statistics GPA: 4.14/4.50

Publications

Conference Papers

Generalized Priority-Aware Shapley Value [Code]
Kiljae Lee, Ziqi Liu, Weijing Tang, and Yuan Zhang. Advances in Neural Information Processing Systems (NeurIPS), 2026. Presented at the ICML 2026 CTB Workshop.

Priority-Aware Shapley Value [Code]
Kiljae Lee, Ziqi Liu, Weijing Tang, and Yuan Zhang. International Conference on Machine Learning (ICML), 2026.

Faithful Group Shapley Value [Code]
Kiljae Lee[*], Ziqi Liu[*], Weijing Tang, and Yuan Zhang. Advances in Neural Information Processing Systems (NeurIPS), 2025. Best Paper Award Honorable Mention, ICML 2025 DataWorld Workshop.

Leave-One-Out Stable Conformal Prediction [Code]
Kiljae Lee and Yuan Zhang. International Conference on Learning Representations (ICLR), 2025.

[*] Equal contribution.

Preprints

First-Order Efficiency for Probabilistic Value Estimation via A Statistical Viewpoint
Ziqi Liu, **Kiljae Lee**, Yuan Zhang, and Weijing Tang. Preprint, 2026. Presented at the ICML 2026 NExT-Game Workshop.

Journal Article

Bayesian Hierarchical Time-Varying Distributed Lag Nonlinear Model: Applications in the Short-Term Association between Ambient Temperature and Daily Confirmed Cases of COVID-19
Dongu Han, **Kiljae Lee**, Yeonseung Chung, Genya Kobayashi, and Taeryon Choi. *Journal of Applied Statistics*, 53(10):1916–1942, 2026.

Honors and Fellowships

Student Travel Award, IMS ICSDS (declined due to one-talk policy) 2026
NeurIPS Top Reviewer; ICML Gold Reviewer Award 2026
Ransom & Marian Whitney Award for Research, OSU Department of Statistics 2026
Best Paper Award Honorable Mention, ICML DataWorld Workshop 2025
University Fellowship, The Ohio State University 2022–2023
Academic Excellence Scholarships, Korea University 2015–2019

Research Appointments

Graduate Research Assistant, The Ohio State University Aug 2025–present

Research with Yuan Zhang on data valuation, attribution, and uncertainty quantification for modern AI systems.

Graduate Research Assistant, Korea University Mar 2020–Aug 2021

Developed a Bayesian semiparametric two-stage meta-analysis model; applied it to U.S. COVID-19 data.

Teaching Experience

Graduate Teaching Assistant, The Ohio State University Aug 2023–present

Teaching assistant across 11 courses. Selected courses: Advanced Theory of Statistics; Statistical Computation; Statistical Machine Learning; Statistical Inference for Data Analytics.

Talks and Presentations

Invited Talks (Scheduled)

Generalized Priority-Aware Shapley Value Dec 2026
IMS International Conference on Statistics and Data Science (ICSDS 2026), Split, Croatia

Generalized Priority-Aware Shapley Value Nov 2026
ASA Statistical Learning and Data Science Conference (SLDS 2026), New York, NY

Poster Presentations

Generalized Priority-Aware Shapley Value 2026
ICML CTB Workshop

Priority-Aware Shapley Value 2026
International Conference on Machine Learning (ICML 2026)

Priority-Aware Shapley Value 2026
The Ohio State University AI Research Summit

Faithful Group Shapley Value 2025
Advances in Neural Information Processing Systems (NeurIPS 2025)

Faithful Group Shapley Value 2025
ICML DataWorld Workshop

Leave-One-Out Stable Conformal Prediction 2025
International Conference on Learning Representations (ICLR 2025)

Academic Service and Leadership

Conference reviewer: ICLR (2025); ICML (2025, 2026); NeurIPS (2025, 2026); AISTATS (2026, 2027).

Leadership: Department representative, Department of Statistics, Korea University (2014); Executive officer, KUBig (Data Science Society), Korea University (2018).

Additional Research and Professional Experience

Data Scientist Intern, United Airlines May 2026–Aug 2026

First at United to model customer search data for commercial use, as a proxy for latent total demand; built demand forecasting models that extend willingness-to-pay estimation beyond observed bookings.

Statistical Consultant, The Ohio State University May–Jul 2025

Advised six clients across psychology, agricultural science, civil engineering, and related fields on statistical modeling and analysis.

Technical Skills

Python, R, C++, SQL; PyTorch, Transformers, scikit-learn, GPU/HPC computing.