

Junu Lee

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Email: junulee@wharton.upenn.edu **Website:** leejunu.github.io

Education

The Wharton School, University of Pennsylvania

Ph.D. in Statistics

Advisors: T. Tony Cai, Zhimei Ren

Philadelphia, PA

08/2022 – Present

Harvard University

A.B. in Mathematics and Statistics

S.M. in Computer Science (concurrent AB/SM program)

Advisor: Lucas Janson

Cambridge, MA

08/2018 – 05/2022

Research interests

Selective inference; Multiple hypothesis testing; Variable selection; e-values and e-processes; Sequential testing; Distribution-free inference;

Papers and preprints

* denotes alphabetical order or equal contribution

- [5] **Junu Lee**, Iliia Popov, and Zhimei Ren. “Full-conformal novelty detection: A powerful and non-random approach”. 2025. arXiv: [2501.02703](https://arxiv.org/abs/2501.02703).
- [4] Jeffrey Zhang and **Junu Lee**. “A general condition for bias attenuation by a non-differentially mismeasured confounder”. 2024. arXiv: [2409.12928](https://arxiv.org/abs/2409.12928).
- [3] **Junu Lee** and Zhimei Ren. “Boosting e-BH via conditional calibration”. 2024. arXiv: [2404.17562](https://arxiv.org/abs/2404.17562).
- [2] Taehyeon Kim, Eric Lin, **Junu Lee**, Christian Lau, and Vaikkunth Mugunthan. “Navigating Data Heterogeneity in Federated Learning: A Semi-Supervised Approach for Object Detection”. In: *Thirty-seventh Conference on Neural Information Processing Systems*. 2023.
- [1] Eugene Curtin, **Junu Lee**, Andrew Lu, and Sophia Sun. “A modified Grassmann algebra approach to theorems on permanents and determinants”. In: *Linear Algebra and its Applications* 581 (2019), pp. 20–35.

Awards and honors

Lawrence D. Brown Student Paper Award Symposium Speaker	'24
NSF Graduate Research Fellowship	'22
Harvard College Research Program	'20
Herchel Smith Harvard Undergraduate Research Fellowship	'20
Derek Bok Certificate of Distinction in Teaching	'19, '20

Talks

Invited talks:

2. **Boosting e-BH via conditional calibration**,
Lawrence D. Brown Student Paper Award Symposium, November 2024.
1. **Boosting e-BH via conditional calibration**,
International Seminar on Selective Inference, June 2024.

Teaching

Teaching Assistant, The Wharton School

STAT 9270*‡: Bayesian Statistical Theory and Methods Spring '24
STAT 4050‡/7050†‡: Statistical Computing with R Fall '23 (Q2)
STAT 1110: Introductory Statistics Fall '23
STAT 1020: Introductory Business Statistics Fall '22

Teaching Assistant, Harvard University

STAT 149: Introduction to Generalized Linear Models Spring '22
STAT 210*: Probability I Fall '21
STAT 111: Introduction to Statistical Inference Spring '20, '21
STAT 110: Introduction to Probability Fall '19, '20, '21

*: graduate-level courses; †: MBA courses; ‡: guest lectures given

Professional service

Wharton Doctoral Ph.D. Mentor

August 2024 – Present

Provided mentorship to incoming Ph.D. students.

Invited Discussant

International Seminar on Selective Inference:

- “E-statistics, group invariance and anytime-valid testing” by Muriel Pérez-Ortiz, December 2024

Industry experience

Dynamo AI

Various

Founding member, advisor

05/2022 – 12/2023

- Developed a multitude of federated learning algorithms and adapted them to various problem domains, e.g., finance, automated driving.
- Met with industry partners to collaborate on algorithms and present finished products.

Hudson River Trading

New York, NY

Algorithm developer intern

06/2021 – 08/2021

- Completed multiple quantitative projects on financial forecasting.

Proton.ai

Boston, MA

ML research intern

05/2019 – 08/2019

- Developed NLP-based recommendation systems for sales teams to efficiently market new products and promotions.
- Contributed to the research and training of customer churn models.