

Jeonghwan (Jayden) Lee

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EDUCATION

09/2022 – Present **The University of Chicago**, Chicago, IL, United States.

- ◇ Ph.D. in **Statistics**.

Advisors: Cong Ma and Chao Gao.

03/2015 – 02/2022 **Korea Advanced Institute of Science and Technology**, Daejeon, Republic of Korea.

◇ B.S. in **Mathematical Sciences**.

◇ Graduation with honors (Summa Cum Laude and the KAIST Presidential Award).

◇ Left for mandatory military service: 10/2018 – 08/2020.

RESEARCH INTERESTS

I am broadly interested in the span of statistics, econometrics, machine learning, and mathematics of data science.

My research interest lies in the following disciplines:

- **Statistics & econometrics:** high-dimensional and non-parametric statistics, causal inference.
- **Machine learning (ML) & mathematics of data science:** theoretical foundations of generative models and large language models (LLMs), optimization, statistical learning under distribution shift.

PUBLICATIONS

Conference papers

- C1. **Off-policy estimation with adaptively collected data: the power of online learning.**

Jeonghwan Lee and Cong Ma.

Conference on Neural Information Processing Systems (NeurIPS), Dec. 2024. ([arXiv](#)) ([PDF](#))

- ## C2. A Generalized Worker-Task Specialization Model for Crowdsourcing: Optimal Limits and Algorithm.

Doyeon Kim*, Jeonghwan Lee*, and Hye Won Chung. (* = equal contribution)

Proceedings of the IEEE International Symposium on Information Theory (ISIT), Jul. 2022. (PDF)

Journal articles

- J1. **A Worker-Task Specialization Model for Crowdsourcing: Efficient Inference and Fundamental Limits.**

Doyeon Kim*, Jeonghwan Lee*, and Hye Won Chung. (* = equal contribution)

IEEE Transactions on Information Theory, Vol. 70, No. 3, pp. 2076–2117, Mar. 2024. ([arXiv](#)) ([PDF](#))

- J2. Robust Hypergraph Clustering via Convex Relaxation of Truncated MLE.

Jeonghwan Lee, Daesung Kim, and Hye Won Chung.

IEEE Journal on Selected Areas in Information Theory, Vol. 1, No. 3, pp. 613–631, Nov. 2020. ([arXiv](#)) ([PDF](#))

Preprints or submitted papers

- ### P1. Learning bounds for doubly-robust covariate shift adaptation.

Jeonghwan Lee and Cong Ma.

Submitted to the *International Conference on Algorithmic Learning Theory (ALT 2026)*. (arXiv) (PDF)

Working papers

- W1. **Harnessing user-to-user social graphs for multi-valued rating matrix completion.**
Jeonghwan Lee.
In preparation for submission, available upon request.

HONORS AND AWARDS

- The 2025 Hackathon – Visionary Award** (Team: JH_sqr) ([code](#)) ([PDF](#)). 09/2025
[LLM Hackathon for Applications in Materials Science & Chemistry.](#)
- Doctoral Overseas Scholarship.** 09/2022 – Present
[Kwanjeong Educational Foundation.](#)
- The KAIST Presidential Award.** 02/2022
The 2022 Commencement Ceremony of [KAIST](#).
- KAIST Math Problem Of the Week (POW)** – Excellence Award. 06/2019
[Department of Mathematical Sciences at KAIST.](#)
- The National College Students Mathematics Competition** – Silver Prize. 12/2017
[Korean Mathematical Society.](#)
- Dean’s List.** 09/2017
[College of Natural Sciences at KAIST.](#)
- National Excellence Scholarship for Science and Engineering.** 03/2017 – 06/2021
[Korea Student Aid Foundation.](#)
- Department Honorary Scholarship** – Awarded to the top student in the department. 03/2017
[Department of Mathematical Sciences at KAIST.](#)

PROFESSIONAL SERVICE

- Conference reviewer** Neural Information Processing Systems (NeurIPS): 2025.

TEACHING EXPERIENCE

Teaching assistants at [the University of Chicago](#)

- Winter 2025 Statistical methods and applications (STAT 22000).
Autumn 2023 Statistical methods and applications (STAT 22000).
Winter 2023 Statistical methods and applications (STAT 22000).

WORK EXPERIENCE

- Republic of Korea Air Force.** 10/2018 – 08/2020
- ◇ Worked as an aerographer (mandatory military service).
 - ◇ Starting position: Airman Basic / Ending position: Staff Sergeant.

ORGANIZATIONAL ACTIVITIES

- 09/2024 – 06/2025 [The University of Chicago Korean Graduate Student Association \(KGSA\)](#).
 ◇ Director of General Affairs.
- 09/2016 – 08/2020 [KAIST Undergraduate Mathematics Colloquium \(KUMC\)](#).
 ◇ Colloquium organizer.

SKILLS

- Programming skills Python, R, C++, Java, MATLAB, $\text{\LaTeX}$.
- Languages Korean (Native), English (Fluent), Japanese (Moderate).

REFERENCES

- Professor [Cong Ma](#) (congm@uchicago.edu)
 ◇ *Assistant Professor* in the [Department of Statistics](#) at the [University of Chicago](#).
- Professor [Chao Gao](#) (chaogao@uchicago.edu)
 ◇ *Professor* in the [Department of Statistics](#) at the [University of Chicago](#).
- Professor [Hye Won Chung](#) (hwchung@kaist.ac.kr)
 ◇ *Associate Professor* in the [School of Electrical Engineering](#) and the [School of Computing](#) at [KAIST](#).