

Jeonghwan Lee

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Citizenship: Republic of Korea

- Research interests**
- ◇ Statistical machine learning: network data analysis, ranking problems, analysis of iterative algorithms.
 - ◇ Theory of statistics: high-dimensional statistics, non-parametric statistics.
 - ◇ Non-convex optimization in statistical estimation and learning tasks.
 - ◇ Theoretical foundations of reinforcement learning.

- Education**
- The University of Chicago** Chicago, IL, United States
- ◇ Incoming first-year Ph.D. student in [Statistics](#): Sep. 2022 –.
- Korea Advanced Institute of Science and Technology** Daejeon, Republic of Korea
- ◇ Bachelor of Science in [Mathematical Sciences](#): Mar. 2015 – Feb. 2022.
 - ◇ Graduated with Summa Cum Laude (**GPA**: 4.10/4.30 (Overall), 4.21/4.30 (Major)).
 - ◇ Left for mandatory military service: Oct. 2018 – Aug. 2020.
- Gyeongnam Science High School** Jinju, Republic of Korea
- ◇ One year early graduation with honor: Mar. 2013 – Feb. 2015.

- Publications**
- Journal articles**
- J1. [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 (JSAIT)*, Volume 1, Issue 3, pp. 613–631, Nov. 2020. (Link: [arXiv:2003.10038](https://arxiv.org/abs/2003.10038)).
- Preprints**
- P1. **A Worker-Task Specialization Model for Crowdsourcing: Efficient Inference and Fundamental Limits**
- ◇ Doyeon Kim¹, Jeonghwan Lee¹, and Hye Won Chung.
 - ◇ arXiv preprint, submitted. (Link: [arXiv:2111.12550](https://arxiv.org/abs/2111.12550)).

- Honors and scholarships**
- The KAIST Presidential Award** Feb. 2022
- ◇ The 2022 Commencement Ceremony of [KAIST](#).
- KAIST Math Problem Of the Week (POW)** Jun. 2019
- ◇ [Department of Mathematical Sciences](#) at [KAIST](#).
 - ◇ Excellence award (The 2nd prize).
- University Students Contest of Mathematics** Dec. 2017
- ◇ [Korean Mathematical Society](#).

¹Equal contribution

- ◇ Silver prize (for majors).

Dean's List

Sep. 2017

- ◇ [College of Natural Sciences](#) at [KAIST](#).

Honor Student at [KAIST](#)

Aug. 2017 – Present

National Excellence Scholarship for Science & Engineering

Mar. 2017 – Jun. 2021

- ◇ Korea Student Aid Foundation.

Department Honorary Scholarship

Mar. 2017 – Jun. 2017

- ◇ [Department of Mathematical Sciences](#) at [KAIST](#).
- ◇ Awarded to the top student in the previous semester.

Financial Aid Scholarship at [KAIST](#)

Mar. 2015 – Jun. 2021

- ◇ Full amount of school support fees.

Attended schools & programs

[The 2nd Workshop on Seeking Low-dimensionality in Deep NNs](#)

Nov. 2021

- ◇ [IEEE Information Theory Society](#).

[Summer School on Random Structures in Optimizations & Related Applications](#)

Jun. 2021

- ◇ [The School of Mathematics](#) at the [University of Minnesota, Twin Cities](#).

[The 17th KIAS Combinatorics Workshop](#)

Aug. 2017

- ◇ Korea Institute for Advanced Study.
- ◇ A special event as *Summer School for Combinatorics*.

Work experience

Learning support volunteer activity.

Mar. 2019 – Dec. 2019

- ◇ The place of work: Jinju Dong Middle School.
- ◇ Worked as a mathematics learning support assistant for two semesters.

Republic of Korea Air Force

Oct. 2018 – Aug. 2020

- ◇ The place of work: Education and Training Command of the Republic of Korea Air Force.
- ◇ Worked as an aerographer (Mandatory military service).
- ◇ Starting position: Airman Basic / Ending position: Staff Sergeant.

[KAIST Undergraduate Math Colloquium \(KUMC\)](#)

Sep. 2016 – Jun. 2018

- ◇ [Department of Mathematical Sciences](#) at [KAIST](#).
- ◇ Worked as a colloquium organizer.

Skills

Computer skills

- ◇ Programming experiences: Python, C++, Java, MATLAB, R.
- ◇ Softwares & Tools: \LaTeX , Excel.

Languages

- ◇ Korean: Native.
- ◇ English: Fluent.
- ◇ Japanese: Moderate.

Miscellanea

Weekly study group in special topics

Jul. 2018 – Sep. 2018

- ◇ [Inference & Information for Data Science Lab](#), [School of Electrical Engineering](#), KAIST.
- ◇ Topics: Probabilistic graphical models.

Weekly mathematics reading seminar

Sep. 2017 – Jun. 2018

- ◇ Topics: Information theory, Theory of Riemann surfaces.

References

Prof. [Hye Won Chung](#).

- ◇ *Assistant Professor* at [School of Electrical Engineering](#), KAIST.
- ◇ E-mail: hwchung@kaist.ac.kr.

Prof. [Ji Oon Lee](#).

- ◇ *Professor* at [Department of Mathematical Sciences](#), KAIST.
- ◇ *Director* at [Stochastic Analysis and Application Research Center](#), KAIST.
- ◇ E-mail: jioon.lee@kaist.edu.

Prof. [Mikyong Lim](#).

- ◇ *Professor* at [Department of Mathematical Sciences](#), KAIST.
- ◇ E-mail: mklim@kaist.ac.kr.