

Junghyun “Nick” Lee

(Last updated: April 23, 2024)

PhD Candidate, OSI Lab & OptiML Lab
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PARTICULARS

EDUCATION

Korea Advanced Institute of Science and Technology (KAIST) Seoul, ROK
PhD in Artificial Intelligence (Kim Jaechul Graduate School of AI) *Mar 2023 -*
Advisors: Se-Young Yun, Chulhee Yun
Cumulative GPA: 4.01 / 4.3

Korea Advanced Institute of Science and Technology (KAIST) Seoul, ROK
MSc in Artificial Intelligence (Kim Jaechul Graduate School of AI) *Sep 2021 - Feb 2023*
Advisors: Se-Young Yun, Chulhee Yun
Cumulative GPA: 4.2 / 4.3
MSc Thesis: Near-Optimal Clustering in Block Markov Decision Processes
Committee: Se-Young Yun, Chulhee Yun, Kee-Eung Kim

Korea Advanced Institute of Science and Technology (KAIST) Daejeon, ROK
BSc in Mathematical Sciences, Computer Science (*Double Major*) *Mar 2017 - August 2021*
Cumulative GPA: 3.77 / 4.3 (Cum laude), Major GPA: 3.78 / 4.3

Changwon Science High School (CSHS) Changwon, ROK
Early graduation *Mar 2015 - Feb 2017*

CURRENT STATUS

Citizen of Republic of Korea (ROK).

CURRENT POSITION

PhD Candidate at OSI Lab & OptiML Lab, GSAI, KAIST
(jointly advised by Prof. Se-Young Yun and Prof. Chulhee Yun)

RESEARCH INTERESTS

- Reinforcement Learning Theory, Bandits
- (Statistical/Online) Learning Theory
- (High-dimensional) Statistics, Probability Theory
- Deep Learning Theory, Optimization Theory
- Algorithmic Fairness
- Probabilistic Machine Learning
- Distributed Algorithms, Networks
- GNN, Graphs
- Applied Mathematics, Statistical Physics
- ML/DL for Natural Sciences

PUBLICATIONS

INTERNATIONAL CONFERENCES/WORKSHOPS

- [C7] Seong Jin Cho, Gwangsu Kim, **Junghyun Lee**, Jinwoo Shin, Chang D. Yoo. Querying Easily Flip-flopped Samples for Deep Active Learning. In the *12th International Conference on Learning Representations (ICLR 2024)*. Vienna, Austria. (link)
- [C6] **Junghyun Lee**, Se-Young Yun, Kwang-Sung Jun. Improved Regret Bounds of (Multinomial) Logistic Bandits via Regret-to-Confidence-Set Conversion. In the *27th International Conference on Artificial Intelligence and Statistics (AISTATS 2024)*. Valencia, Spain. (link)
- [W1] Prin Phunayaphibarn*, **Junghyun Lee***, Bohan Wang, Huishuai Zhang, Chulhee Yun. Large Catapults in Momentum Gradient Descent with Warmup: An Empirical Study. In the *NeurIPS 2023 Workshop: Mathematics of Modern Machine Learning (M3L)*, **oral presentation**. New Orleans, USA. (link)
(*: equal contributions)
- [C5] **Junghyun Lee***, Hanseul Cho*, Se-Young Yun, Chulhee Yun. Fair Streaming Principal Component Analysis: Statistical and Algorithmic Viewpoint. In the *37th Conference on Neural Information Processing Systems (NeurIPS 2023)*. New Orleans, USA. (link)
(*: equal contributions)
- [C4] **Junghyun Lee**, Laura Schmid, Se-Young Yun. Flooding with Absorption: An Efficient Protocol for Heterogeneous Bandits over Complex Networks. In the *27th Conference on Principles of Distributed Systems (OPODIS 2023)*, **best student paper**. Tokyo, Japan. (link)
- [C3] Yassir Jedra*, **Junghyun Lee***, Alexandre Proutière, Se-Young Yun. Nearly Optimal Latent State Decoding in Block MDPs. In the *26th International Conference on Artificial Intelligence and Statistics (AISTATS 2023)*. Valencia, Spain. (link)
(*: equal contributions, authorship in alphabetical order)
- [C2] **Junghyun Lee**, Gwangsu Kim, Matt Olfat, Mark Hasegawa-Johnson, Chang D. Yoo. Fast and Efficient MMD-based Fair PCA via Optimization over Stiefel Manifold. In the *36th AAAI Conference on Artificial Intelligence (AAAI 2022)*. Virtual. (link)
- [C1] **Junghyun Lee***, Chani Jung*, Yoo Hwa Park*, Dongmin Lee*, Juyeon Yoon, Shin Yoo. Preliminary Evaluation of SWAY in Permutation Decision Space via a Novel Euclidean Embedding. In the *13th Symposium on Search-Based Software Engineering (SSBSE 2021)*. Virtual. (link)
(*: equal contributions)

INTERNATIONAL JOURNALS

- [J1] **Junghyun Lee**, Minyoung Hwang, Cheolwon Bae. Some Loci in the Animation of a Sangaku Diagram. In *Forum Geometricorum*, 16:187-191, 2016. (link)

PREPRINTS

Coming soon

DOMESTIC CONFERENCES/WORKSHOPS

- [C3] Murad Aghazada*, Mohammed Benabbassi*, **Junghyun Lee**, Se-Young Yun. On the Estimation of Linear Softmax Parametrized Probability Distribution. In the *Korean Software Congress (KSC 2023)*.
- [W6] **Junghyun Lee**, Se-Young Yun, Kwang-Sung Jun. Improved Regret Bounds of (Multinomial) Logistic Bandits via Regret-to-Confidence-Set Conversion. In the *9th Joint Conference of Korean Artificial Intelligence Association (JKAIA 2023)*.
- [W5] Prin Phunayaphibarn*, **Junghyun Lee***, Bohan Wang, Huishuai Zhang, Chulhee Yun. Large Catapults in Momentum Gradient Descent with Warmup: An Empirical Study. In the *9th Joint Conference of Korean Artificial Intelligence Association (JKAIA 2023)*.
- [W4] **Junghyun Lee**, Laura Schmid, Se-Young Yun. Communication-Efficient Collaborative Heterogeneous Bandits in Networks. In the *8th Joint Conference of Korean Artificial Intelligence Association (JKAIA 2023)*.
- [W3] **Junghyun Lee***, Hanseul Cho*, Se-Young Yun, Chulhee Yun. Fair Streaming Principal Component Analysis: Statistical and Algorithmic Viewpoint. In the *8th Joint Conference of Korean Artificial Intelligence Association (JKAIA 2023)*.

- [C2] **Junghyun Lee**, Se-Young Yun. Preliminary Empirical Analyses of Clustering in Block MDPs. In the *Korean Software Congress (KSC 2022)* (link). **best oral presentaion**.
- [W2] Yassir Jedra*, **Junghyun Lee***, Alexandre Proutière, Se-Young Yun. Near-Optimal Clustering in Block MDPs with Implications on Reward-Free RL. In the *6th Joint Conference of Korean Artificial Intelligence Association (CKAIA 2022)*. **best paper award**.
- [C1] **Junghyun Lee**, Minchan Jeong*, Namgyu Ho*, Se-Young Yun. A Statistical Analysis of Stochastic Gradient Noises of SGD. In the *Korean Computer Congress (KCC 2022)* (link).
- [W1] **Junghyun Lee**, Gwangsu Kim, Matt Olfat, Mark Hasegawa-Johnson, Chang D. Yoo. MMD-based Fair PCA via Manifold Optimization. In the *5th Joint Conference of Korean Artificial Intelligence Association (JKAIA 2021)*. **best paper award**.

DOMESTIC JOURNALS

- [J1] **Junghyun Lee**, Se-Young Yun. Empirical Analyses of Corruption in the Clustering of Block MDPs. In *KIISE Transactions on Computing Practices*, 30(4):187-192, 2024. (Invited paper)

WORKING/PENDING PAPERS

1. Prin Phunyahibarn*, **Junghyun Lee***, Bohan Wang, Huishuai Zhang, Chulhee Yun (under review)
2. **Junghyun Lee**, Yassir Jedra, Alexandre Proutière, Se-Young Yun (work in progress)
3. **Junghyun Lee**, Kwang-Sung Jun, Se-Young Yun. (work in progress)
4. **Junghyun Lee**, Kyoungseok Jang, Milan Vojnović, Kwang-Sung Jun, Se-Young Yun. (work in progress)
5. Kunwoo Na, **Junghyun Lee**, Mingyu Kim, Hojung Jung, Eunbi Yoon, Se-Young Yun, Sungbin Lim (work in progress)
6. Yonghyeon Lee, **Junghyun Lee**, Minchan Jeong, Krzysztof Choromanski, Se-Young Yun (work in progress)
7. Woosung Koh, **Junghyun Lee**, Se-Young Yun (work in progress)
8. **Junghyun Lee***, Hanseul Cho*, Gwangsu Kim, Chang D. Yoo, Se-Young Yun, Chulhee Yun (work in progress)

ACADEMIC AWARDS/HONORS/SCHOLARSHIPS

1. MLSS 2024 (OIST, Okinawa, Japan) Travel Grant
2. NeurIPS 2023 Scholar Award
3. *27th Conference on Principles of Distributed Systems (OPODIS 2023)* **best student paper** - “Flooding with Absorption: An Efficient Protocol for Heterogeneous Bandits over Complex Networks”
4. *6th Joint Conference of Korean Artificial Intelligence Association (CKAIA 2022)* **best paper award**¹ - “Near-Optimal Clustering in Block MDPs with Implications on Reward-Free RL”
5. The Way To Stockholm, Korea Foundation for Advanced Studies (KFAS), Winter 2022.
6. *5th Joint Conference of Korean Artificial Intelligence Association (JKAIA 2021)* **best paper award**¹ - “MMD-based Fair PCA via Manifold Optimization”
7. Cum laude, KAIST, Class of 2021.
8. Freshmen Dean’s List, KAIST, Spring 2017.
9. Hansung Son Jae Han Scholarship for Gifted Students, 2016.

PROFESSIONAL SERVICES

REVIEWERS

ICML 2024, AISTATS 2024, ICLR 2024, NeurIPS 2023, AAAI 2023-2024, KSC 2023

VOLUNTEERS

MobiHoc 2022

¹joint with 3 other papers

ORGANIZERS

- OSI Lab Seminar - Theory Division, Sep 2023 - current
- MDLT+P Seminar (<http://sites.google.com/view/mdlt-p>), July 2022 - Feb 2023

INTERNS (MENTORED BY ME)

Current:

- Kunwoo Na (Seoul National University)
- Woosung Koh (Yonsei University)

Previous:

- Prin Phunyaphibarn (KAIST)
- Murad Aghazada (KAIST)
- Mohammed Bennabbassi (Université de Sherbrooke)
- Eric Patarin (ENSTA Paris)
- Hojung Jung (KAIST)

(INVITED) TALKS + POSTER SESSIONS²

1. Querying Easily Flip-flopped Samples for Deep Active Learning.
 - Conferences/Workshops
 - *12th International Conference on Learning Representations (ICLR 2024)*. Poster session, Vienna, Austria, 2024.05.07. - 2023.05.11.
2. Improved Regret Bounds of (Multinomial) Logistic Bandits via Regret-to-Confidence-Set Conversion
 - Seminars
 - Universitat Pompeu Fabra (Prof. Gergely Neu), Barcelona, Spain, 2024.05.06.
 - Conferences/Workshops
 - *27th International Conference on Artificial Intelligence and Statistics (AISTATS 2024)*. Poster session, Valencia, Spain, 2024.05.02. - 2023.05.04.
 - *9th Joint Conference of Korean Artificial Intelligence Association (JKAIA 2023)*. Poster session, Seoul, Republic of Korea, 2023.11.24.
3. Large Catapults in Momentum Gradient Descent with Warmup: An Empirical Study
 - Conferences/Workshops
 - *37th Conference on Neural Information Processing Systems (NeurIPS 2023) M3L Workshop*. Poster & oral presentation session, New Orleans, USA, 2023.12.10. - 2023.12.17.
 - *9th Joint Conference of Korean Artificial Intelligence Association (JKAIA 2023)*. Poster session, Seoul, Republic of Korea, 2023.11.24.
4. Fair Streaming Principal Component Analysis: Statistical and Algorithmic Viewpoint
 - Conferences/Workshops
 - *Korea Software Congress (KSC 2023)*. Top Conference Session, Busan, Republic of Korea, 2023.12.20. - 2022.12.22.
 - *37th Conference on Neural Information Processing Systems (NeurIPS 2023)*. Poster session, New Orleans, USA, 2023.12.10. - 2023.12.17.
 - *8th Joint Conference of Korean Artificial Intelligence Association (CKAIA 2023)*. Poster session, Yeosu, Republic of Korea, 2023.07.18.
5. Flooding with Absorption: An Efficient Protocol for Heterogeneous Bandits over Complex Networks³
 - Conferences/Workshops

²Organized by the research topic

³previous title: Communication-Efficient Collaborative Heterogeneous Bandits in Networks

- *27th Conference on Principles of Distributed Systems (OPODIS 2023)*. Oral session, Tokyo, Japan, 2023.12.06. - 2023.12.08.
 - *8th Joint Conference of Korean Artificial Intelligence Association (CKAIA 2023)*. Poster session, Yeosu, Republic of Korea, 2023.07.18.
 - *21st INFORMS Applied Probability Society (APS) Conference*. Poster session, Nancy, France, 2023.06.28. - 2023.06.30.
6. Nearly Optimal Latent State Decoding in Block MDPs
- Conferences/Workshops
 - *21st INFORMS Applied Probability Society (APS) Conference*. Invited session (host: Prof. Jaron Sanders), Nancy, France, 2023.06.28. - 2023.06.30.
 - *Korea Computer Congress (KCC 2023)*. Top Conference Session, Jeju, 2023.06.18. - 2023.06.20.
 - *26th International Conference on Artificial Intelligence and Statistics (AISTATS 2023)*. Poster session, Valencia, Spain, 2023.04.25. - 2023.04.27.
 - *6th Joint Conference of Korean Artificial Intelligence Association (CKAIA 2022)*. Paper award presentation session, Jeju Island, Republic of Korea, 2022.08.02.
7. Fast and Efficient MMD-based Fair PCA via Optimization over Stiefel Manifold
- Seminars
 - KAIST Math Graduate Student Seminar (KMGS), online, 2022.03.17.
 - KAIST Math (Prof. Donghwan Kim) Seminar, online, 2022.02.15.
 - KAIST (Prof. Chang D. Yoo) & ICL (Prof. Yingzhen Li) Joint Seminar, online, 2021.10.20.
 - KAIST (Prof. Chang D. Yoo) & ICL (Prof. Björn Schuller) Joint Seminar, online, 2021.10.15.
 - UIUC ECE 590SIP Seminar (Prof. Mark Hasegawa-Johnson), online, 2021.09.29.
 - Conferences/Workshops
 - *Korea Software Congress (KSC 2022)*. Top Conference Session, Jeju Island, Republic of Korea, 2022.12.21. - 2022.12.23.
 - *36th AAAI Conference on Artificial Intelligence (AAAI 2022)*. Poster session, online, 2022.02.22. - 2022.03.01.
 - *KAIST AI Workshop 21/22 (MARS AI Research)*. Poster session, KAIST (N1 Building), Republic of Korea, 2022.01.11.
 - *5th Joint Conference of Korean Artificial Intelligence Association (JKAIA 2021)*. Paper award presentation session, online, 2021.11.05.
 - * Here, a short version “MMD-based Fair PCA via Manifold Optimization” was presented.
8. Preliminary Evaluation of SWAY in Permutation Decision Space via a Novel Euclidean Embedding
- Conferences/Workshops
 - *13th Symposium on Search-Based Software Engineering (SSBSE 2021)* Research paper track, online, 2021.10.11. - 2021.10.12.

TEACHING EXPERIENCE

TEACHING ASSISTANT (NON-HUMANITIES)

- **AI709: Advanced Deep Learning Theory**, Prof. Chulhee Yun, 2024 Spring, GSAI, KAIST.
- **AI616: Deep Learning Theory**, Prof. Chulhee Yun, 2023 Spring & Fall, GSAI, KAIST.
- **AI605: Deep Learning for Natural Language Processing**, Prof. James Thorne, 2022 Fall, GSAI, KAIST.
- **AI614: Robot Task and Motion Planning**, Prof. Beomjoon Kim, 2022 Spring, GSAI, KAIST.
- **AI505: Optimization for AI**, Prof. Se-Young Yun, 2021 Fall, GSAI, KAIST.

TEACHING ASSISTANT (HUMANITIES)

- **HSS302: Special Lectures on Linguistics <Language Register and English>**, Prof. Seonmin Park, Spring 2018, KAIST.
- **English Camp for Incoming Freshmen**, EFL Office, Jan 2019, KAIST.
- **English Camp for Incoming Freshmen**, EFL Office, Jan 2018, KAIST.

FRESHMEN TUTORING

- **MAS102: Calculus 2**, Fall 2018, KAIST.
- **MAS101: Calculus 1**, Spring 2018, KAIST.

UNOFFICIAL/VOLUNTARY TUTORING

- **MAS102, PH142, MAS109**, Fall 2017, KAIST.
with 10~15 freshmen taking the courses
- **MAS101, PH141, CH101, MAS109**, Spring 2017, KAIST.
with 10~15 freshmen taking the courses

UNDERGRAD RESEARCH EXPERIENCE

- **Optimization and Statistical Inference Lab (OSI Lab), GSAI, KAIST, ROK**, Spring 2020 - Summer 2021.
Advisor: Se-Young Yun (Graduate School of AI, KAIST)
Collaborators⁴: SeongYoon Kim*, Namgyu Ho**, Minchan Jeong*** (*Industrial and System Engineering, KAIST; **Intern, OSI Lab; ***Graduate School of AI, KAIST)
Research topic: *Toward a Better Understanding of Dynamics of Deep Neural Networks and SGD*
- **Artificial Intelligence & Machine Learning Lab (AIM Lab), School of EE, KAIST, ROK**, Fall 2019 - Summer 2021.
Advisor: Chang D. Yoo*, Gwangsu Kim* (*School of Electrical Engineering, KAIST)
Collaborator: Matt Olfat (UC Berkeley & Citadel)
Research topic: *Can Fairness in Principal Components be Obtained, Even in High Dimensions?*
- **Biomedical Mathematics Group (BIMAG), IBS, ROK**, Spring 2021 - Summer 2021.
Advisor: Jae Kyoung Kim (Dept. of Mathematical Sciences, KAIST)
Collaborator: Seokmin Ha*, Dae Wook Kim* (*Dept. of Mathematical Sciences, KAIST)
Research topic: *Applying machine learning methodologies to plant circadian clock model inference*
- **Computational Intelligence for Software Engineering Lab (COINSE Lab), School of Computing, KAIST, ROK**, Fall 2020 - Summer 2021.
Advisor: Shin Yoo (School of Computing, KAIST)
Collaborator: Chani Jung*, Yoo Hwa Park*, Dongmin Lee*, Juyeon Yoon* (*School of Computing, KAIST)
Research topic: *SWAY for Decision Space of Permutations with Case Study on Test Case Prioritisation*
- **Individual Study, Dept. of Mathematical Sciences, KAIST, ROK**, Summer 2019 - Fall 2019.
Advisor: Andreas Holmsen (Dept. of Mathematical Sciences, KAIST)
Study topic 1: *Asymptotics for the number of C_4 's in a graph under certain condition,*
Study topic 2: *Maximum number of columns in a $0-1$ $2n \times n$ matrix with no induced 2×2 identity matrix*
- **Mathematics Research and Education Program (R&E), CSHS, ROK**, Mar 2015 - Feb 2017.
Advisor: Seungkyun Cha*, Jisoo Byun** (*Division of Mathematics, CSHS; **Dept. of Mathematics Education, Kyungnam University)
Collaborator: Minyoung Hwang*, Cheolwon Bae* (*Division of Mathematics, CSHS)
Research topic: *Some Loci in the Animation of a Sangaku Diagram*

COURSEWORKS

PROJECTS

- **AI602: Advanced Deep Learning**, Fall 2021.
Instructor: Prof. Sung Ju Hwang (Kim Jaechul Graduate School of AI, KAIST)
Collaborator: Wonho Zhung*, Minchan Jeong** (*Dept. of Chemistry, KAIST; **Kim Jaechul Graduate

⁴Briefly collaborated with Cheolhyeong Lee (currently post-doctoral associate of Center for Data Science at NYU)

School of AI, KAIST)

Project topic: *Incorporating Latent Space into 3D Molecular Generative Model*

- **CS454: Artificial Intelligence based Software Engineering**, Fall 2020.
Instructor: Prof. Shin Yoo (School of Computing, KAIST)
Collaborator: Chani Jung*, Yoo Hwa Park*, Dongmin Lee* (*School of Computing, KAIST)
Project topic: *SWAY for Decision Space of Permutations, with Case Study on Test Case Prioritisation*

- **CS376: Machine Learning**, Fall 2018.
Instructor: Prof. Eunho Yang (School of Computing, KAIST; now at Graduate School of AI, KAIST)
Collaborators: Youngjin Jin*, Minsung Park**, Hyunjin Kim*** (*School of Electrical Engineering, KAIST; **Dept. of Biological Sciences, KAIST; ***School of Computing, KAIST)
Project topic: *Building a predictive model for predicting Gotham city's apartment prices*

- **MAS480(B): Introduction to Mathematical Biology**, Fall Semester, 2018.
Instructor: Prof. Jaekyung Kim (Dept. of Mathematical Sciences, KAIST)
Collaborator: Seokmin Ha (Dept. of Mathematical Sciences, KAIST)
Project topic: *Reverse Analysis Problem of Two-gene System in the Perspective of Adaptation*

- **CS492(I): Special Topics in Computer Science <Deep Learning for Real-World Problems>**, Fall 2020.
Instructors: Prof. Seunghoon Hong*, Prof. Alice Oh* (*School of Computing, KAIST)
Collaborators: Minyoung Hwang*, Junseok Choi* (*School of Computing, KAIST)
Project topic: *Deep learning based solution for semi-supervised classification on Naver Fashion Dataset, and Korean Open-Domain QA task on Naver KorQuAD-Open dataset. (2nd, 1st place in leaderboard, respectively)*

- **CS470: Introduction to Artificial Intelligence**, Fall Semester, 2019.
Instructor: Prof. Seunghoon Hong (School of Computing, KAIST)
Collaborator: Youngjin Jin*, Minsung Park** (*School of Electrical Engineering, KAIST; **Dept. of Biological Sciences, KAIST)
Project topic: *Implementing a model for music genre classification problem.*

REPORTS

1. **Junghyun Lee**. "Optimal Transport Theory and Neural Network Optimization", *MAS583(C): Topics in Mathematics <Gradient Flows in Optimal Transport Framework>*, 2023 Fall.
2. Wonho Zhung, Minchan Jeong, **Junghyun Lee**. "Incorporating Latent Space into 3D Molecular Generative Model", *AI602: Advanced Deep Learning*, 2021 Fall.
3. Junseok Choi, Minyoung Hwang, **Junghyun Lee** "Semi-Supervised Learning Task on Naver Fashion Dataset", *CS492(I): Special Topics in Computer Science <Deep Learning for Real-World Problems>*, 2020 Fall.
4. Minyoung Hwang, Junseok Choi, **Junghyun Lee** "Korean Open-Domain QA Task on Naver KorQuAD-Open Dataset", *CS492(I): Special Topics in Computer Science <Deep Learning for Real-World Problems>*, 2020 Fall.
5. **Junghyun Lee**, Chani Jung, Yoo Hwa Park, Dongmin Lee. "SWAY for Decision Space of Permutations with Case Study on Test Case Prioritisation", *CS454: Artificial Intelligence Based Software Engineering*, 2020 Fall. (later published at SSBSE 2021)
6. **Junghyun Lee**. "Lecture Note 5: Randomized Algorithms", *CS500: Design and Analysis of Algorithm*, 2020 Spring.
7. **Junghyun Lee**. "Critical Review on Theoretical Aspects of Binary Decision Diagram, with a Focus in Variable Ordering", *CS402: Introduction to Logic for Computer Science*, 2020 Spring.
8. Seokmin Ha, **Junghyun Lee**. "Reverse Analysis Problem of Two-gene System in the Perspective of Adaptation", *MAS480(B): Topics in Mathematics <Introduction to Mathematical Biology>*, 2018 Fall.

SKILLS

PROGRAMS

- Languages: **Python, Matlab**
- Applications : **LaTeX**

LANGUAGES

- **Korean:** Native
- **English:** Highly proficient
TOEIC 985/990 (2021)
(Mock) TOEFL iBT 118 (2017)

REFERENCES

Se-Young Yun

- Associate Professor, Kim Jaechul Graduate School of AI, KAIST
- OSI Lab
- Personal website

Chulhee Yun

- Assistant Professor, Kim Jaechul Graduate School of AI, KAIST
- OptiML Lab
- Personal website

Alexandre Proutière

- Professor, School of Electrical Engineering and Computer Science, KTH Royal Institute of Technology
- Personal website

Kwang-Sung Jun

- Assistant Professor, Department of Computer Science, University of Arizona
- Personal website

Chang D. Yoo

- Professor, School of Electrical Engineering, KAIST
- U-AIM Lab
- Personal website

Gwangsu Kim

- Assistant Professor, Department of Statistics, Jeonbuk National University
- Personal website

MISC.

KAO-S

- First Violinist, Nov 2023 - Feb 2024.

MERRY Orchestra

- First Violinist, Mar 2023 - Jul 2023.

MDOP Orchestra at Kyung Hee University

- First Violinist, Jun 2022 - Sep 2022.

KAIST Orchestra (KAO)

- First Violinist, Mar 2017 - Mar 2021.
- **Principal First Violinist**, Jan 2018 - Dec 2018.

KAIST Mathematical Sciences Student Council

- Member of department student council, Mar 2018 - Dec 2020.
- In charge of *Mathematical Sciences Help-Desk* (Mar 2018 - June 2019)
A short lecture series (given by selected math undergrad.) that takes place a week before the exam period to help all students with Basic Elective courses. (MAS109, MAS201, MAS250)

ICISTS

- Division of Global Partnership, Sep 2018 - Aug 2019.
- **TF leader** of *Opening/Gala Night* (ICISTS-2019)
- TF member of *Science in a Nutshell* (ICISTS-2019)
- **Vice President**, Sep 2019 - Jul 2020.