

# Jaehyun Koo (구재현)

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## EDUCATION

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**Massachusetts Institute of Technology** Cambridge, MA, United States, 2023 -  
Ph.D. Student, EECS Department  
Research Area: Theoretical Computer Science  
Advisor: Mohsen Ghaffari

**Korea Advanced Institute of Science and Technology (KAIST)** Daejeon, Korea, 2017 - 2023  
Undergraduate  
School of Computing (Minor: Mathematics)

**Gyeonggi Science High School** Suwon, Korea, 2014 - 2017

## PUBLICATIONS

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**An Optimal MPC Algorithm for Subunit-Monge Matrix Multiplication, with Applications to LIS**  
Jaehyun Koo  
SPAA '24

**Anarchy in the APSP: Algorithm and Hardness for Incorrect Implementation of Floyd-Warshall**  
Jaehyun Koo  
FUN '24

## SERVICES

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- Conference Reviewing: SOSA 2025, SODA 2025, ISAAC 2020

## EXPERIENCE

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**Teaching and Mentoring** 2014 -

- Olympiad in Informatics
  - International Olympiad in Informatics (IOI) Korean Team Selection Contest Problemsetter (2019 - 2024)
  - Korean Olympiad in Informatics (KOI) Problemsetter (2020 - 2024)
  - Head coach of Korean IOI Team (2024, 2023, 2019, 2018)
  - Coach in Korean IOI Seasonal Training Camp (2024, 2021, 2020, 2019, 2017)

**Software Engineering** 2020 - 2022

- Software Engineer at MOLOCO, mobile advertisement platform company located in Seoul, Korea.
- Developed backend features using Golang.
- The work was considered as an alternative military service from Korean Military Manpower Administration.

## SELECTED AWARDS AND HONORS

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- Google Code Jam 2021, 2020 Top 25 Invited Finalist (rank 12 in 2020)
- Facebook Hacker Cup 2021, 2020, 2019, 2017 Top 25 Invited Finalist (rank 6 in 2020)
- ICPC World Finals 2019, 2018 Participant
- Presidential Science Scholarship, Korea Student Aid Foundation, 2017.
- Gold Medal in International Olympiad in Informatics 2016 (15th place out of 308 participants)
- Gold Medal in Asia-Pacific Olympiad in Informatics 2016 (5th place out of 169 participants)
- Silver Medal in International Olympiad in Informatics 2015 (46th place out of 322 participants)