

EDUCATION

Korea Advanced Institute of Science and Technology (KAIST)

Ph.D. in Mathematical Sciences
Advisor: Prof. Bo-Hae Im

Daejeon, Korea
Mar. 2024 – Current

Korea Advanced Institute of Science and Technology (KAIST)

M.S. in Mathematical Sciences
Advisor: Prof. Bo-Hae Im

Daejeon, Korea
Feb. 2024

- Thesis: *A numerical method to find an optimal independent system for certain congruence subgroups*

Ulsan National Institute of Science and Technology (UNIST)

B.S. in Mathematical Sciences, Minor in Computer Science and Engineering
Graduated *Summa Cum Laude*
Advisor: Prof. Hae-Sang Sun

Ulsan, Korea
Feb. 2022

- Thesis: *Introduction to class field theory*

Daejeon Dongsin Science High School

Daejeon, Korea
Feb. 2018

RESEARCH INTEREST

- Algebraic/Analytic Number Theory
 - Modular forms / Automorphic forms
 - Elliptic curves over function fields
 - Drinfeld modular forms

PUBLICATIONS

Preprints

1. (joint with Seokhyun Choi, Bo-Hae Im) Analytic rank-one elliptic curves over function fields and their rank over certain ring class fields, submitted, 2026

TALKS

Invited

- | | |
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| [2] Elliptic Curves over Global Function Fields
60th KAIST Graduate Student Seminar (KMGS), KAIST | September 10, 2026
Daejeon, Korea |
| [1] Analytic rank-one elliptic curves over function fields and their rank over certain ring class fields
2026 Chungcheong Mathematical Society Annual Meeting, Seowon University | June 12, 2026
Cheongju, Korea |

TEACHING EXPERIENCE

- **KAIST**
Calculus I, TA (Spring 2023)
Introduction to Number Theory, TA (Spring 2023)
Calculus II, TA (Fall 2022, Fall 2023, Fall 2026)
Linear Algebra, TA (Fall 2022, Fall 2023)
Introduction to Linear Algebra, TA (Spring 2022, Spring 2025)
Introduction to Linear Algebra, Deputy Head TA (Spring 2024, Fall 2024, Fall 2025, Spring 2026)
Modern Algebra I, TA (Spring 2025)
Algebra II, TA (Fall 2026)
- **UNIST**
Calculus I, TA (Spring 2019, Spring 2020, Spring 2021)
Calculus II, TA (Fall 2019, Fall 2020, Fall 2021)

SERVICE

- Co-organizing KAIST Math Graduate student Seminar ([KMGS](#)) Sept. 2022 – Current
- Co-organizing 2026 Workshop for Young Mathematicians in Korea ([WYMK 2026](#)) Jan. 2026 – Aug. 2026
- Graduate Student Representative in Department of Mathematical Sciences, KAIST Feb. 2024 – Aug. 2025
- Co-organizing 2025 Workshop for Young Mathematicians in Korea ([WYMK 2025](#)) Jan. 2025 – Aug. 2025
- Co-organizing 2024 Workshop for Young Mathematicians in Korea ([WYMK 2024](#)) Jan. 2024 – Aug. 2024
- Co-organizing 2023 Workshop for Young Mathematicians in Korea ([WYMK 2023](#)) Jan. 2023 – Aug. 2023
- Co-organizing 2022 Workshop for Young Mathematicians in Korea ([WYMK 2022](#)) Sept. 2022 – Dec. 2022

AWARDS AND HONORS

- Best TA Award at KAIST Sept. 2025
- Exemplary Conduct Scholarship at KAIST Jan. 2025
- Best TA Award at KAIST Mar. 2024
- Best TA Award at KAIST Aug. 2022
- National Excellence Scholarship (Natural Sciences and Engineering) Mar. 2020 – Feb. 2022
- Silver Prize at UNIST Math Competition Nov. 2018

Last Updated: September 14, 2026