

Byeong-Seo Min

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Education

ChungAng University

B.S. in Mathematics

- Minor

March 2019 - Feb 2025 (expected)

ChungAng University

B.S. in Computer Science and Engineering

March 2020 - Feb 2025 (expected)

- Major (change of major)
- Currently, Major GPA(4.37/4.5), Total GPA(4.30/4.5)
- Leave of absence due to military service in the Republic of Korea Army (Jan 2021 - July 2022)

Research Experience

Undergraduate research student

PAICLAB, ChungAng University

Jan 2023 - June 2024

- Working as an undergraduate research student of PAICLAB (<https://sites.google.com/view/paiclab>)
- Research topic was Private AI.

Teaching

ChungAng University

Teaching Assistant

Aug 2023 - Dec 2023

- Served as a teaching assistant for Professor JoonWoo Lee's Mobile App Development course at Chung-Ang University.

Publications

Low-Latency Linear Transformation with Small Key Transmission for Private Neural Network on Homomorphic Encryption

ByeongSeo Min¹, JoonWoo Lee^{2*}

May 2024

- IEEE Transactions on Dependable and Secure Computing.(Submitted)
- Archive link (<https://eprint.iacr.org/2024/883>)

Projects

Building and optimizing GPU-based homomorphic encryption library

Samsung Advanced Institute of Technology

July 2023 - Oct 2023

- Successfully contributed, enabling patent application as a result.

Patent

APPARATUS AND METHOD FOR HOMOMORPHIC ENCRYPTION OPERATION

JoonWoo Lee, ByeongSeo Min, SeomKyun Song

- Current Status: Application
- Applicant: Samsung Electronics Co., Ltd / Chung-Ang University Industry-Academic Cooperation Foundation.

Low-Latency Linear Transformations with Small Key Transmission for Private Neural Network on Homomorphic Encryption

JoonWoo Lee, ByeongSeo Min

- Current Status: Application
- Applicant: Chung-Ang University Industry-Academic Cooperation Foundation.

Scholarship

1st Sem **Merit-based Scholarship**, Chung-Ang University Department of Mathematics

2nd Sem **Merit-based Scholarship**, Chung-Ang University Department of Mathematics

5th Sem **Merit-based Scholarship**, Chung-Ang University Department of Computer Science and Engineering

6th Sem **Merit-based Scholarship**, Chung-Ang University Department of Computer Science and Engineering

7th Sem **Merit-based Scholarship**, Chung-Ang University Department of Computer Science and Engineering