Hwang In Tak

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RESEARCH INTERESTS

Lattice–Based Cryptography, including but not limited to: Fully Homomorphic Encryption, Digital Signatures and Zero Knowledge Proofs

EDUCATION

Seoul National University   2023 — Present
Integrated M.S./Ph.D. in Computer Science & Engineering
Advisor: Prof. Yongsoo Song

DGIST   2018 — 2022
B.S. in School of Undergraduate Studies   *Summa Cum Laude*

PUBLICATIONS

2024/306
Concretely Efficient Lattice-based Polynomial Commitment from Standard Assumptions
Intak Hwang, Jinyeong Seo, Yongsoo Song
CRYPTO 2024

2023/1328
Optimizing HE via Level-aware Key-switching
Intak Hwang, Jinyeong Seo, Yongsoo Song
WAHC 2023

PRESENTATIONS

Optimizing HE via Level-aware Key-switching   2023.04
2023 KMS Spring Meeting

HONORS AND SCHOLARSHIPS

National Cryptographic Contest   2023
Special Award

CTF Security Competitions   2020 — 2022
SSTF Hacker's Playground 2022   *5th place*
WhiteHat Contest 2021   *3rd place*
DEF CON CTF 2021   *Finalist*
PlaidCTF 2021   *5th place*
Real World CTF 2020/2021 (Media Coverage)   *1st place*

Midnight Sun CTF 2020 Finals   *7th place*
TokyoWesterns CTF 2020 Finals   *3rd place*
DEF CON CTF 2020   *Finalist*

DGIST Dean's List   2020

Skills

Languages
Korean (native), English (fluent)

Programming Languages
Go, Python (SageMath), C/C++, C#, Rust, LaTeX

Other Activities

Member of CTF Team CodeRed   2020 — Present
I participate in CTF competitions from time to time, mostly solving crypto challenges.

Developer & Writer of Team Invertible   2020 — Present
I am actively working on INVERTIBLE, a sokoban puzzle game. We are planning to release the game on Steam.

Other Interests

I love watching films. I wrote and directed three short films in college, and I still write screenplays as a hobby!