# Hwang In Tak

Email: intak.hwang@snu.ac.kr Website: sp301415.com

### RESEARCH INTERESTS

Lattice-Based Cryptography, Fully Homomorphic Encryption 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

### HONORS AND SCHOLARSHIPS

### National Cryptographic Contest

2024

Grand Prize, Excellence Prize

# **National Cryptographic Contest**

2023

Special Prize

# **CTF Security Competitions**

SSTF Hacker's Playground 2022

2020 - 2022

WhiteHat Contest 2021
DEF CON CTF 2021
PlaidCTF 2021
Real World CTF 2020/2021 (Media Coverage)

Finalist 5th place

5th place

3rd place

Real World CTF 2020/2021 (Media Coverage Midnight Sun CTF 2020 Finals

1st place 7th place

TokyoWesterns CTF 2020 Finals

3rd place

DEF CON CTF 2020 Finalist

DGIST Dean's List

# **S**KILLS

### Languages

Korean (native), English (fluent)

# **Programming Languages**

Go, Python (SageMath), C/C++, C#, Rust, LTEX

# **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 four short films, and I still write screenplays as a hobby!