

Minki Lee

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Integrated M.S. + Ph.D. Program Student
CompSec Lab: <https://compsec.postech.ac.kr>
Department of Computer Science and Engineering
Pohang University of Science and Technology (POSTECH), South Korea



INTERESTS

- {Cyber-Physical Systems (CPS) | Distributed Systems | Embedded Systems} Security
- Secure-by-Design Development
- CPS Architecture & Engineering
- Open Source Software Security

SKILLS

- **Languages:** Korean (Native), English (Proficient)
- **Computer Languages:** C/C++, Python, JavaScript, PHP, Dart
- **Tools and Testbeds:** PX4/Pixhawk system, ROS2, gazebo, Crazyflie, Matlab simulations

EDUCATION

Integrated M.S. & Ph.D. Program Computer Security Lab, POSTECH CSE	September 2025 - Present <i>Pohang, South Korea</i>
<ul style="list-style-type: none">- Advisor: Seulbae Kim- Research in Cyber-Physical Systems' security- Swarm system resilience and robustness	
Bachelor of Engineering in Computer Science Major DGIST, School of Undergraduate Studies	February 2021 - August 2025 <i>Daegu, South Korea</i>
<ul style="list-style-type: none">- WAM/GPA: 3.60/4.30, percent scale: 93.0%- Bachelor's Thesis-substitute Report: Security for Reliable Swarm Cyber-Physical System- Courseworks: {Computer Security, Computer Network, Computer Architecture, Operating Systems, Computer Algorithms, Control Engineering, Real-time Embedded Systems}	
Summer Session Visiting Student UC Berkeley, GPA 4.0 / 4.0	June 2023 - August 2023 <i>Berkeley, California</i>
<ul style="list-style-type: none">- Visited by FGLP (Freshman Global Leadership Program), supported by DGIST	
Completion of Technical Venture Leader Course DGIST TVA (Technical Venture-leader Academy)	23 February 2023 <i>Daegu, South Korea</i>

AWARDS AND HONORS

Special Award: KIISC President's Award <i>2025 ACDC (AI Cyber Defense Contest)</i>	December 2025
<ul style="list-style-type: none">- Awarded by the Korea Institute of Information Security & Cryptology (KIISC).- Selected as a Finalist (Team RHCP) after ranking 5th (student league) in the qualifier.- <i>Focus:</i> Adversarial attacks and defense strategies for AI models (AI for Security).	
Tech Award: KDIA President's Award <i>HackTheDrone 2024</i>	October 2024
<ul style="list-style-type: none">- Awarded by the Korea Drone Innovation Association (Team CompSec).- Ranked 7th in Finals and 2nd in the Qualifier.- <i>Focus:</i> Drone protocol vulnerabilities, packet analysis, and RF signal jamming using SDR.	
Grand Prize (DGIST President's Award) <i>DGIST Startup Contest</i>	October 2022

- Awarded for the most innovative business model among pre-startup teams.
- Won **2nd place** overall as a team leader.
- *Focus*: Proposed a Personalized Learning SaaS platform using AI-driven analytics.

Full National Scholarship | DGIST

February 2021 – August 2025

- Awarded full tuition support for continuous academic excellence (8 semesters).

PUBLICATIONS

Demo: One Shot All Kill: Building Optimal Attack on Swarm Drones

Symposium on Vehicle Security and Privacy (VehicleSec 2024), San Diego, United States

Minki Lee, Gangmin Kim, Jonghyun Kang, Hyunwoo Kim, Jangwon Lee, Hongjun Choi

<https://dx.doi.org/10.14722/vehiclesec.2024.25008>

EXPERIENCES

Research

Visiting Undergraduate Intern

June 2024 - August 2025

CompSec Lab, POSTECH

Pohang, South Korea

- Advisor: Seulbae Kim
- Computer Security & CPS Security
- Research in Drone Swarm System Testbed

Undergraduate Student Researcher

November 2022 – June 2024

Cyber-Physical Security (CPSec) Lab, DGIST

Daegu, South Korea

- Advisor: Hongjun Choi
- Research about Secure and Robust Operation of Future Mobility (Drone Swarm)
- UGRP (Undergraduate Group Research Project) for Resilient Swarm Drones
- Presented Demo Poster at VehicleSec 2024, San Diego, United States

Research Internship

December 2023 – January 2024

2024 Winter Internship Program, Department of EECS, DGIST

Daegu, South Korea

- CSI Lab, Advisor: Kyung-Joon Park
- Research about Secure and Robust Future Mobility System

Teaching

Research Assistant

August 2024 - December 2024

Department of Computer Science and Engineering, POSTECH

Pohang, South Korea

- CSED199: Freshman Research Participation
- Computer Science and Engineering Major

Undergraduate TA (Teaching Assistant)

August 2024 - December 2024

School of Undergraduate Studies, DGIST

Daegu, South Korea

- CSE401: Introduction to Database
- Computer Science and Engineering Major

Work

CUOP (Company - University Cooperation Program) Intern

December 2024 – February 2025

Quester

Daegu, South Korea

- Intern Developer
- Computer Vision AI model (object detection and tracking) for sensor fusion
- Experienced {YOLOv8, BiSeNet, SORT, DeepSORT, SAMURAI, SLAM}
- Product Security Analysis (Reverse Engineering)

CUOP (Company - University Cooperation Program) Intern

June 2022 – August 2022

BostonAIMS

Seoul, South Korea

- Intern Developer
- AI model Server Deployment / Development
- Experienced Huggingface, Dart / Flutter, Docker along with Firebase Server