

# 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

<b>Integrated M.S. &amp; Ph.D. Program</b> Computer Security Lab, POSTECH CSE	September 2025 - Present <i>Pohang, South Korea</i>
- Advisor: Seulbae Kim - Research in Cyber-Physical Systems' security - Swarm system resilience and robustness	
<b>Bachelor of Engineering in Computer Science Major</b> DGIST, School of Undergraduate Studies	February 2021 - August 2025 <i>Daegu, South Korea</i>
- 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}	
<b>Summer Session Visiting Student</b> UC Berkeley, GPA 4.0 / 4.0	June 2023 - August 2023 <i>Berkeley, California</i>
- Visited by FGLP (Freshman Global Leadership Program), supported by DGIST	
<b>Completion of Technical Venture Leader Course</b> DGIST TVA (Technical Venture-leader Academy)	23 February 2023 <i>Daegu, South Korea</i>

## AWARDS AND HONORS

<b>Special Award:</b> KIISC President's Award   <i>2025 ACDC (AI Cyber Defense Contest)</i>	December 2025
- Awarded by the Korea Institute of Information Security & Cryptology (KIISC). - Selected as a <b>Finalist</b> (Team RHCP) after ranking <b>5th</b> (student league) in the qualifier. - <b>Focus:</b> Adversarial attacks and defense strategies for AI models (AI for Security).	
<b>Tech Award:</b> KDIA President's Award   <i>HackTheDrone 2024</i>	October 2024
- Awarded by the Korea Drone Innovation Association (Team CompSec). - Ranked <b>7th</b> in Finals and <b>2nd</b> in the Qualifier. - <b>Focus:</b> Drone protocol vulnerabilities, packet analysis, and RF signal jamming using SDR.	
<b>Grand Prize (DGIST President's Award)</b>   <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

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### **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

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### Research

#### **Visiting Undergraduate Intern**

CompSec Lab, POSTECH

June 2024 - August 2025

*Pohang, South Korea*

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

#### **Undergraduate Student Researcher**

Cyber-Physical Security (CPSC) Lab, DGIST

November 2022 – June 2024

*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**

2024 Winter Internship Program, Department of EECS, DGIST

December 2023 – January 2024

*Daegu, South Korea*

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

### Teaching

#### **Research Assistant**

Department of Computer Science and Engineering, POSTECH

August 2024 - December 2024

*Pohang, South Korea*

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

#### **Undergraduate TA (Teaching Assistant)**

School of Undergraduate Studies, DGIST

August 2024 - December 2024

*Daegu, South Korea*

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

### Work

#### **CUOP (Company - University Cooperation Program) Intern**

December 2024 – February 2025

*Daegu, South Korea*

Quester

- 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

*Seoul, South Korea*

BostonAIMS

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