Minki Lee

Integrated M.S. + Ph.D. Program Student
CompSec Lab, Department of Computer Science and Engineering
Pohang University of Science and Technology (POSTECH), South Korea
{leeminki} at postech.ac.kr | GitHub: @leeminki02

INTERESTS

- Cyber-Physical Systems (CPS) Security

- Distributed & Embedded System Engineering

- Secure Design and Development

- CPS System Engineering & Architecture

EDUCATION

Integrated M.S. & Ph.D. Program   Expected to enroll, in September 2025
Computer Security Lab, POSTECH CSE   *Pohang, South Korea*
- Advisor: Seulbae Kim
- Research in Cyber-Physical Systems' security
- Swarm system resilience and defense

Bachelor of Engineering in Computer Science Major   February 2021 - August 2025
DGIST, School of Undergraduate Studies   *Daegu, South Korea*
- 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   June 2023 - August 2023
UC Berkeley, GPA 4.0 / 4.0   *Berkeley, California*
- Visited by FGLP (Freshman Global Leadership Program), supported by DGIST

Completion of Technical Venture Leader Course   23 February 2023
DGIST TVA (Technical Venture-leader Academy)   *Daegu, South Korea*

SKILLS

Languages: Korean (Native), English (Proficient)

Computer Languages: C/C++, Python, JavaScript(+HTML+CSS), PHP, Dart

Tools and Testbeds: PX4 & ROS2 & gazebo, Crazyflie 2.X, Matlab-based simulations

AWARDS AND HONORS

Tech Award (Team CompSec) | *HackTheDrone 2024*   30 October 2024
- Korea Drone Innovation Association President's Award
- **7th place** in Finals, October 30th, 2024.
- **2nd place** in Qualifier, September 7th - 8th, 2024.
- Packet and Network analysis, Software-Defined Radio

Full Scholarship | *DGIST*   February 2021 – August 2025
- Full National Scholarship

Grand Prize (DGIST President Award) Winner | *DGIST Startup Contest*   8 October 2022
- As leader of **2nd place winning** pre-startup group
- Personalized learning Software-as-a-Service (SaaS) provider startup

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 at 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

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

Teaching

Undergraduate TA (Teaching Assistant) — August 2024 - December 2024
School of Undergraduate Studies, DGIST — *Daegu, South Korea*
- Subject: CSE401, Introduction to Database
- Computer Science and Engineering Major