

# Hye Yoon Lee

Accelerated Intelligent Systems (AISys) Lab. @ SNU

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## RESEARCH INTERESTS

Trustworthy and Safe AI (Adversarial attack and defense), Accelerating AI applications (data-free learning, model compression, knowledge distillation, quantization, etc), Generative AI (GANs, VAEs, Diffusion Models)

## EDUCATION

Sep. 2023 ~ Present	<b>Seoul National University</b> Ph.D. in Department of Electrical and Computer Engineering	Seoul, Korea
Sep. 2021 ~ Aug. 2023	<b>Yonsei University</b> M.S. in Computer Science, <i>GPA(4.45 / 4.5)</i>	Seoul, Korea
Mar. 2019 ~ Aug. 2021	<b>Yonsei University</b> B.S. in Computer Science, <i>GPA(4.09 / 4.5)</i>	Seoul, Korea

## PUBLICATIONS

- ❖ **Hyevoon Lee**, Kanghyun Choi, Dain Kwon, SunJong Park, Mayoore Selvarasa Jaiswal, Noseong Park, Jonghyun Choi, and Jinho Lee. "DataFreeShield: Defending Adversarial Attacks without Training Data." **ICML 2024**.
- ❖ Jaewon Jung, Jaeyong Song, Hongsun Jang, **Hyevoon Lee**, Kanghyun Choi, Noseong Park, and Jinho Lee. "Fast Adversarial Training with Dynamic Batch-level Attack Control." **DAC 2023**.
- ❖ Kanghyun Choi, **Hyevoon Lee**, Deokki Hong, Joonsang Yu, Noseong Park, Youngsok Kim, and Jinho Lee. "It's all in the teacher: Zero-shot quantization brought closer to the teacher." **CVPR 2022 (Oral Presentation)**.
- ❖ Deokki Hong, Kanghyun Choi, **Hyevoon Lee**, Joonsang Yu, Noseong Park, Youngsok Kim, and Jinho Lee. "Enabling hard constraints in differentiable neural network and accelerator co-exploration." **DAC 2022**.

## AWARDS

- ❖ **The 28th Humantech Paper Award (Silver Prize)** 2022  
Co-Author
- ❖ **Software Capstone Design Excellence Award** 2021  
Hosted by Yonsei CS Department
- ❖ **Asan Foundation (1<sup>st</sup> Prize)** 2020  
IT approach to social welfare

## TEACHING EXPERIENCE

**Yonsei University** (*Teaching Assistant*) Logic Circuit Design (Fall 2021), Multi-core and GPU Programming (Spring 2022)

**Seoul National University** (*Teaching Assistant*) Digital System Design and Practices (Fall 2023), Programming Methodology (Spring 2024)

## PROJECTS

- ❖ Accelerating Diffusion Models for Landscape Generation 2023  
*Electronics and Telecommunications Research Institute (ETRI)*
- ❖ Semantic Modification Method for High-resolution Face Images 2022  
*Electronics and Telecommunications Research Institute (ETRI)*
- ❖ High-resolution Face Image Generation by Transformer-based GAN 2021  
*Electronics and Telecommunications Research Institute (ETRI)*