MIJIN KOO

M.S. Student in Intelligence and Information

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EDUCATION

09/2024 – Present **Seoul National University, Seoul, Korea** **Lab Link**
M.S. in Intelligence and Information (Advisor: Prof. Nojun Kwak)

03/2020 – 08/2024 **Ewha Womans University, Seoul, Korea**
B.S. in Computer Science and Engineering (GPA: 4.08/4.50)

RESEARCH EXPERIENCE

01/2024 – Present **Seoul National University, Seoul, Korea**
- Graduate Researcher, Machine Intelligence and Pattern Recognition Lab (MIPAL)
- Research Focus: **Computer Vision, Generative AI, Trustworthy AI, Diffusion Models**
- Developing robust and secure generative vision models, with a primary focus on data protection against potential misuse.

06/2023 – 12/2023 **Korea Institute of Science and Technology (KIST), Seoul, Korea**
- Undergraduate Research Intern, AI and Robotics Institute (Advisor: Dr. Suhyun Kim)
- Developed adversarial defense mechanisms utilizing Diffusion and Super-Resolution models.
- Conducted comparative analysis on purification performance against diverse adversarial attacks.

PUBLICATIONS

Under Review **Fingerprinting Diffusion Models in the Wild**
Submitted to CVPR 2026
Junhoo Lee, **Mijin Koo**, Nojun Kwak

2026 **Targeted Data Protection for Diffusion Model by Matching Training Trajectory** **arxiv**
The 40th Annual AAAI Conference on Artificial Intelligence (AAAI 2026)
Hojun Lee*, **Mijin Koo***, Yeji Song, Nojun Kwak **(* Equal Contribution)**

2025 **Adversarial Purification via Super-Resolution and Diffusion** **PDF**
IEEE/CVF International Conference on Computer Vision (ICCV 2025)
Mincheol Park, Cheonjun Park, Seungseop Lim, **Mijin Koo**, Hyunwuk Lee, Won Woo Ro, Suhyun Kim

PROJECTS

03/2025 – 06/2025 **A Single Word Bypass – How Name Tokens Break Data Protection** **Coursework @ SNU · Video · PDF**
- Proved via mechanistic analysis that token choice bypasses existing diffusion personalization safeguards.
- Proposed a token-agnostic defense strategy and established robust evaluation protocols for realistic threats.

02/2023 – 06/2023 **CareSpoon: AI-based Nutrition Monitoring Service for Seniors** **Capstone Design @ Ewha Womans Univ. · GitHub**
- Engineered an Object Detection pipeline (PyTorch) for food recognition and deployed a **FastAPI** server.
- Built a custom food image dataset via AI HUB to enhance model accuracy for Korean cuisine.
- **Selected as the University Representative Team** for the National SW Talent Festival.

07/2021 – 08/2021 **Smart Bakery: Self-Order Kiosk Web Service** **Undergraduate Course Project · GitHub**
- Developed a full-stack prototype integrating Vanilla JavaScript frontend with an AI inference backend.
- Implemented an Image Classification model (PyTorch) to automate bakery product checkout.

EXTRACURRICULAR EXPERIENCE

02/2023 – 02/2024 **President, SK LOOKIE (Social Venture Club)**
- Directed the university chapter, overseeing social impact projects and sustainable business modeling.

03/2021 – 08/2022 **Manager / Academic Lead, AI Club Euron** **GitHub**
- Curated the curriculum for Computer Vision (CS231n) study sessions and led technical seminars.

07/2021 – 07/2022 **Core Member, Google Developer Student Club (GDSC)** **Github**
- Active participant in MLOps and Mobile Dev (React Native) tracks; solved algorithmic challenges.

HONORS & AWARDS

11/2023 **Selected as University Representative Team, SW Talent Festival** **Ewha Womans University**

05/2023 **Excellence Award, Capstone Project Poster Session** **Ewha Womans University**

02/2023 **2nd Place (Excellence Award), SK Telecom AI Tech Academy** **SK Telecom**

11/2022 **3rd Place, SW Start-up Competition** **Ewha Womans University**