# Gaon An

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## Education

**Seoul National University** *Sep. 2019 - Present*
M.S./Ph.D. in Computer Science

**Seoul National University** *Mar. 2013 - Aug. 2019*
B.A. in Economics
- Summa Cum Laude
- Minor in Computer Science

## Experience

**DeepMetrics** *Jun. 2022 - Present*
Head of Research
- Working on developing an reinforcement learning model for ICU mechanical ventilation recomendation.

**Optimization and Financial Engineering Lab, Seoul National Univeristy** *Dec. 2017 - Feb. 2018*
Reserach Intern
- Worked on implementing and optimizing genetic algorithms.

## Publications

**Direct Preference-based Policy Optimization without Reward Modeling**
**Gaon An***, Junhyeok Lee*, Xingdong Zuo, Norio Kosaka, Kyung-Min Kim, and Hyun Oh Song
NeurIPS 2023

**Preemptive Image Robustification for Protecting Users against Man-in-the-Middle Adversarial Attacks**
Seungyong Moon*, **Gaon An***, and Hyun Oh Song
AAAI 2022

**Optimal channel selection with discrete QCQP**
Yeonwoo Jeong*, Deokjae Lee*, **Gaon An**, Changyong Son, and Hyun Oh Song
AISTATS 2022

**Uncertainty-Based Offline Reinforcement Learning with Diversified Q-Ensemble**
**Gaon An***, Seungyong Moon*, Jang-Hyun Kim, and Hyun Oh Song
NeurIPS 2021

**Parsimonious Black-Box Adversarial Attacks via Efficient Combinatorial Optimization**
Seungyong Moon*, **Gaon An***, and Hyun Oh Song
ICML 2019 (long talk)

## Honors & Awards

Qualcomm Innovation Fellowship *2024*
NeurIPS Top Reviewers *2022*
Qualcomm Innovation Fellowship Finalist *2020, 2022*

## Academic Services

**Conference Reviewer** ICML (2021-), NeurIPS (2021-), ICLR (2022-)
**Program Chair Committee** NeurIPS Workshop on ImageNet Past, Present, Future (2021)

## Teaching

**Teaching Assistant** Engineering Mathematics 2 (2020)
**Teaching Assistant** Introduction to Deep Learning (2019, 2022)

## Talks

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| **SNU AI Retreat** | Direct Preference-based Policy Optimization without Reward Modeling (2023) |
| **SNU AI Retreat** | Uncertainty-Based Offline Reinforcement Learning with Diversified Q-Ensemble (2022) |
| **LG Tech Talk** | Uncertainty-Based Offline Reinforcement Learning with Diversified Q-Ensemble (2022) |
| **CJ Logistics Tech Talk** | Uncertainty-Based Offline Reinforcement Learning with Diversified Q-Ensemble (2022) |

## Skills

**Programming Languages and Frameworks**

- Advanced: Python, PyTorch, Jax, Tensorflow, Scikit-learn, Latex
- Intermediate: C++

**Languages**

- Native: Korean
- Fluent: English