# SEUNGYONG MOON

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#### **EDUCATION**

#### Seoul National University

Mar. 2019 -

Ph.D. in Computer Science Advisor: Hyun Oh Song

Relevant Coursework: Advanced Theory in Computation (4190.561), Probabilistic Graphical Models

(M1522.001300), Neural Networks (M3309.002300)

#### Seoul National University

Mar. 2011 - Feb. 2019

B.S. in Mathematics, B.A. in Economics, Minor in Computer Science

Honors: Summa Cum Laude

Relevant Coursework: Linear Algebra (300.203A), Real Analysis (881.425), Algorithms (4190.407),

Introduction to Deep Learning (M2177.004300), Advanced Artificial Intelligence (4190.569)

Leave of absence to fulfill mandatory military service (2013 - 2015)

#### **PUBLICATIONS**

Discovering Hierarchical Achievements in Reinforcement Learning via Contrastive Learning Seungyong Moon, Junyoung Yeom, Bumsoo Park, Hyun Oh Song

Neural Information Processing Systems (NeurIPS), 2023

Rethinking Value Function Learning for Generalization in Reinforcement Learning Seungyong Moon, Jun Yeong Lee, Hyun Oh Song

Neural Information Processing Systems (NeurIPS), 2022

Query-Efficient and Scalable Black-Box Adversarial Attacks on Discrete Sequential Data via Bayesian Optimization

Deokjae Lee, Seungyong Moon, Junhyeok Lee, Hyun Oh Song

International Conference on Machine Learning (ICML), 2022

Preemptive Image Robustification for Protecting Users against Man-in-the-Middle Adversarial Attacks

Seungyong Moon\*, Gaon An\*, Hyun Oh Song

AAAI Conference on Artificial Intelligence (AAAI), 2022

Uncertainty-Based Offline Reinforcement Learning with Diversified Q-Ensemble

Gaon An\*, Seungyong Moon\*, Jang-Hyun Kim, Hyun Oh Song

Neural Information Processing Systems (NeurIPS), 2021

Parsimonious Black-Box Adversarial Attacks via Efficient Combinatorial Optimization

Seungyong Moon\*, Gaon An\*, Hyun Oh Song

International Conference on Machine Learning (ICML), 2019

Selected as a long talk (159/3424=4.64%)

#### AWARDS AND SCHOLARSHIPS

NeurIPS Scholar Award	2023
NAVER Ph.D. Fellowship Award	2022
NeurIPS Top Reviewers	2022
Yulchon AI Star Scholarship	2022
Qualcomm Innovation Fellowship Finalists	2020, 2022
KFAS Computer Science Graduate Student Scholarship	2019 - 2024
The National Scholarship for Science and Engineering	2015 - 2016
Gwanak Association Scholarship	2012

#### TEACHING EXPERIENCE

Teaching Assistant	Fall 2020, Fall 2022
Machine Learning (4190.666)	
Teaching Assistant	Spring 2019
Introduction to Deep Learning (M2177.0043)	
Undergraduate Student Instructor	Fall 2017
Basic Calculus 2 (033.017)	
Undergraduate Student Instructor	Spring 2017
Basic Calculus 1 (033.016)	

# WORK EXPERIENCE

Research Intern	Jun. 2023 - Sep. 2023
KRAFTON, Seoul, South Korea	
Worked on reinforcement learning for gaming environments	
Research Intern	Jun. 2022 - Sep. 2022
DeepMetrics, Seoul, South Korea	
Worked on reinforcement learning for ventilator control	
Research Intern	Jul. 2017 - Aug. 2017
NAVER Search & Clova, Seongnam-si, South Korea	
Worked on data augmentation for paraphrase identification	

# ACADEMIC SERVICES

# Conference Reviewer

ICML (2022, 2023, 2024), NeurIPS (2021, 2022, 2023), ICLR (2024), AAAI (2022, 2023, 2024)

# Journal Reviewer

Neurocomputing (2021), Machine Learning (2023), Transactions on Intelligent Vehicles (2023)

# **SKILLS**

# **Programming Languages and Frameworks**

- Advanced: Python, PyTorch, TensorFlow, JAX, LaTeX
- Intermediate: C++, MATLAB

# Languages

- Korean (native)
- English (fluent)