Sangwoo Shin

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EDUCATION

03/2015~ 08/2022	**Sungkyunkwan University** **B.S in Mathematics** *(Summa Cum Laude)* Selected courses: Probability Theory(A+), Advanced Linear Algebra(A+), Real analysis(A+), Algebraic Topology(A+), Differential Geometry(A+)	Suwon, South Korea
08/2022 ~ 08/2024	**Sungkyunkwan University** **M.S in Computer Science and Engineering** Advisor: Honguk Woo	Suwon, South Korea

PUBLICATIONS

I changed my name from Sangwoo Cho to Sangwoo Shin.

*: Equal Contribution

1. Semantic Skill Grounding for Embodied Instruction-Following in Cross-Domain Environments
   Sangwoo Shin*, SeungHyun Kim*, Youngsoo Jang, Moontae Lee, Honguk Woo
   Association for Computational Linguistics (ACL) Findings, 2024

2. SemTra: A Semantic Skill Translator for Cross-domain Zero-shot Policy Adaptation
   Sangwoo Shin, Minjong Yoo, Jeongwoo Lee, Honguk Woo
   AAAI Conference on Artificial Intelligence (AAAI), 2024

3. One-shot Imitation in a Non-Stationary Environment via Multi-Modal Skill
   Sangwoo Shin, Daehee Lee, Minjong Yoo, Woo Kyung Kim, Honguk Woo
   International Conference on Machine Learning (ICML), 2023

4. Skills Regularized Task Decomposition for Multi-task Offline Reinforcement Learning
   Minjong Yoo, **Sangwoo Cho**, Honguk Woo
   Neural Information Processing Systems (NeurIPS), 2022 (Oral Presentation)

5. An Efficient Combinatorial Optimization Model Using Learning-to-Rank Distillation
   Hyunsung Lee*, **Sangwoo Cho***, Honguk Woo
   AAAI Conference on Artificial Intelligence (AAAI), 2022 (Oral Presentation)

6. Differentiable Ranking Metric Using Relaxed Sorting for Top-K Recommendation
   Hyunsung Lee, **Sangwoo Cho**, Yeongjae Jang, Jaekwang Kim, Honguk Woo
   IEEE Access, 2021

7. A Global DAG Task Scheduler Using Deep Reinforcement Learning and Graph Convolution Network
   Hyunsung Lee, **Sangwoo Cho**, Yeongjae Jang, Jinkyu Lee , Honguk Woo
   IEEE Access, 2021

WORK EXPERIENCES

1. LG AI Research
   Advisor: Moontae Lee, Youngsoo Jang   Oct. 2023 ~ Jan. 2024
   - Controllable LLMs with Multi-Objective RLHF

RESEARCH EXPERIENCES

1. Undergraduate Research Students   Aug. 2020 ~ Dec.2020
   Understanding of Algebraic Geometry | Advisor: Sukmoon Huh
   Topics: Zariski topology, Tensor, Riemann mapping theorem, etc.
2. Undergraduate Research Students
   Partial Differential Equations and Artificial Intelligence | Advisor: Seok-Bae Yun   Dec.2020 ~ Mar.2021
   Topics: Cybenko's universal approximation theorem, etc.

TEACHING

1. Private Tutoring   Jan. 2020 ~ June. 2020
   Linear Algebra (Textbook: Linear Algebra Done Right – Sheldon Axler)
   Topics: Nil-potent, Jordan canonical form, Diagonalization, Similarity of linear operators, etc

SCHOLARSHIPS

2022 ~ 2023   Full-Funded Scholarship

2021   Han-Gill Scholarship

2019 Fall   National Academic Excellence Scholarship