Hee-Jun Jung

Github: github.com/maroo-sky Personal webpage: maroo-sky.github.io/

Research Interests

Disentanglement Learning, Group Theory, Variational Auto-Encoder (VAE), Combinatorial Generalization, Representation Learning

Education

Kyung Hee University

B.S. - Dpartment of Mechanical Engineering; GPA: 3.72/4.30, major GPA: 3.84/4.30, Courses: Object-oriented Programming, Discrete Structure, Engineering Mathematics (1,2,3)

_	Gwangju Institute of Science and Technology
•	Integrated - AI Graduate School; GPA: 3.52/4.50 (current)
	Courses: Algorithms, Artificial Intelligence, Machine Learning, Reinforcement Learning

Suwon, South Korea
 Mar. 2012 - Feb. 2020

Gwangju, South Korea Mar. 2020 - present

SKILLS SUMMARY

- Languages: Python, C++
- Frameworks: Scikit, NLTK, Pytorch, matplotlib
- Tools: Docker, GIT
- **Platforms**: Linux, Windows
- Soft Skills: Leadership, Writing, Public Speaking

EXPERIENCE

 Natural Language Processing Lecture
 GIST

 • Teaching Assistant
 1st semester, 2020, 2022

 • Model Implementation: Implement RNN and Transformer model for Neural Machine Translation task.

PUBLICATIONS

- CFASL: Composite Factor-Aligned Symmetry Learning for Disentanglement in Variational AutoEncoder, TMLR, 11/2024: author: Hee-Jun Jung, Jeahyoung Jung, Kangil Kim; [paper, code, video]
- Feature Structure Distillation with Centered Kernel Alignment in BERT transferring, Expert Systems With Applications, 2023: IF 8.5, JCR 9.8%; author: Hee-Jun Jung, Doyeon Kim, Seung-Hoon Na, Kangil Kim; [paper, code]

SUBMMISIONS

- Consistent Symmetry Representation over Latent Factors of Identical Variations, ICLR 2025 submission: author: Hee-Jun Jung, Hoyong Kim, Ilmin Kang, Kangil Kim; [paper, code]
- Symmetric Space Learning for Combinatorial Generalization, ICLR 2025 submission: author: Jeahyoung Jeong, Hee-Jun Jung, Kangil Kim; [paper, code]
- Multiple Invertible and Equivariant Transformation for Disentanglement in VAEs, TPAMI, under review: author: Hee-Jun Jung, Jeahyoung Jung, Kangil Kim; [paper, code]

Projects

- Development of Schema-Loading Neural Network for Accumulation of Trained Hypotheses into General and Shared Hypotheses Space: Work was supported by the National Research Foundation of Korea (NRF) grant funded by the Korea government (MSIT) (2022R1A2C2012054)
- Development of service robot and contents supporting children's reading activities based on artificial intelligence: Work was supported by the Ministry of Culture, Sports and Tourism, in South Korea

HONORS AND AWARDS

- Mentor Scholoarship 2^{nd} semester, 2015
- Superiority Scholarship 2^{nd} semester, 2017
- Superiority Scholarship 2019