Jungwoo Park

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LinkedIn | GitHub | Google Scholar | Kaggle

EDUCATION

Korea University

Ph.D. in Computer Science and Engineering

Sep. 2024 – Present

Seoul, South Korea

· Advisor: Prof. Jaewoo Kang

Kwangwoon University

B.S. in Information Convergence

Seoul, South Korea

Mar. 2018 - Feb. 2024

- Overall GPA of 4.17/4.5, Major GPA of 4.43/4.5
- Full-ride merit scholarships × 2, one-quarter tuition scholarships × 3

RESEARCH **INTERESTS**

LLMs, Pre-Training, Mechanistic Interpretability

PUBLICATIONS

- 1. Yein Park, Jungwoo Park, Jaewoo Kang, "ASGuard: Activation-Scaling Guard to Mitigate Targeted Jailbreaking Attack," Submitted to ICLR 2026
- 2. Sihyeon Park, Jungwoo Park, Hyunjae Kim, Jaewoo Kang, Bumsoo Kim, "Efficient Patch Search in Whole Slide Images via Morphological Momentum Prototype Learning," Submitted to ICLR 2026
- 3. Taewhoo Lee, Minju Song, Chanwoong Yoon, Jungwoo Park, Jaewoo Kang, "The Curious Case of Analogies: Investigating Analogical Reasoning in Large Language Models," Submitted to AAAI 2026
- 4. Jaehoon Yun*, Jiwoong Sohn*, Jungwoo Park*, Hyunjae Kim, Xiangru Tang, Yanjun Shao, Yonghoe Koo, Minhyeok Ko, Qingyu Chen, Mark Gerstein, Michael Moor, Jaewoo Kang, "Med-PRM: Medical Reasoning Models with Stepwise, Guideline-verified Process Rewards," EMNLP 2025
- 5. Jungwoo Park, Taewhoo Lee, Chanwoong Yoon, Hyeon Hwang, Jaewoo Kang, "Outlier-Safe Pre-Training for Robust 4-Bit Quantization of Large Language Models," ACL 2025
- 6. Yein Park, Chanwoong Yoon, Jungwoo Park, Minbyul Jeong, Jaewoo Kang, "Does Time Have Its Place? Temporal Heads: Where Language Models Recall Time-specific Information," ACL 2025
- 7. Hyunjae Kim, Hyeon Hwang, Jiwoo Lee, Sihyeon Park, Dain Kim, Taewhoo Lee, Chanwoong Yoon, Jiwoong Sohn, Jungwoo Park, Olga Reykhart, Thomas Fetherston, Donghee Choi, Soo Heon Kwak, Qingyu Chen, Jaewoo Kang, "Small language models learn enhanced reasoning skills from medical textbooks," NPJ digital medicine 8.1 (2025): 240
- 8. Jungwoo Park*, Young Jin Ahn*, Kee-Eung Kim, Jaewoo Kang, "Monet: Mixture of Monosemantic Experts for Transformers," ICLR 2025
- 9. Yein Park, Chanwoong Yoon, Jungwoo Park, Donghyeon Lee, Minbyul Jeong, Jaewoo Kang, "ChroKnowledge: Unveiling Chronological Knowledge of Language Models in Multiple Domains," ICLR 2025
- 10. Youngjin Ahn*, Jungwoo Park*, Sangha Park, Jonghyun Choi, Kee-Eung Kim, "SyncVSR: Data-Efficient Visual Speech Recognition with End-to-End Crossmodal Audio Token Synchronization," Interspeech 2024

PROJECTS

Jax/Flax Re-implementation of DeiT and DeiT-III [GitHub]

Mar. 2024

- Reproduction of ViT training on ImageNet-1k and ImageNet-21k with DeiT and DeiT-III recipes.
- Trained on a TPU v4-64 pod slice, supported by the TPU Research Cloud program.

Jax/Flax Inference Codes for LLMs on TPU [GPT-NeoX] [StarCoder]

Jun. 2023

- Implementation of GPT-NeoX (Polyglot) and StarCoder (GPTBigCode) models using Jax/Flax.
- Applied Tensor Parallelism to facilitate up to 30B models on a TPU-v3-8 node.

Korean GPT-2 Pre-Training [GitHub] [Demo]

Sep. 2020

- A pure PyTorch implementation of GPT-2 for simple, easy and comprehensible code.
- Trained 300M model with 30GB korean corpus (5B tokens) on 2×V100 GPUs for 24 days.

COMPETITIONS Kaggle Competitions Kaggle Master (highest rank of 54th) • Feedback Prize - Evaluating Student Writing [Overview] [GitHub] Mar. 2022 Gold Medal (4th place / 2,058 teams) • Google - American Sign Language Fingerspelling Recognition [Overview] [GitHub] Aug. 2023 Gold Medal (5th place / 1,315 teams) • G2Net Detecting Continuous Gravitational Waves [Overview] [GitHub] Jan. 2023 Silver Medal (12nd place / 936 teams) • Learning Equality - Curriculum Recommendations [Overview] Mar. 2023 Silver Medal (13rd place / 1,057 teams) • Benetech - Making Graphs Accessible [Overview] Jun. 2023 Silver Medal (26th place / 608 teams) • Google AI4Code – Understand Code in Python Notebooks [Overview] [GitHub] Nov. 2022 Silver Medal (39th place / 1,135 teams) • Feedback Prize - Predicting Effective Arguments [Overview] [GitHub] Aug. 2022 Silver Medal (40th place / 1,557 teams) • CommonLit Readability Prize [Overview] [GitHub] Aug. 2021 Silver Medal (42nd place / 3,633 teams) • Bristol-Myers Squibb – Molecular Translation [Overview] [GitHub] Jun. 2021 Silver Medal (50th place / 874 teams) • Riiid Answer Correctness Prediction [Overview] [GitHub] Jan. 2021 Silver Medal (78th place / 3,406 teams) • Humpback Whale Identification [Overview] Mar. 2019 Bronze Medal (189th place / 2,120 teams) • Quick, Draw! Doodle Recognition Challenge [Overview] Dec. 2018 *Bronze Medal (74th place / 1,309 teams)* **AWARDS Academic Awards** • Dean's List in the 5th semester of B.S. Oct. 2022 • Dean's List in the 3rd semester of B.S. Oct. 2021 ACADEMIC 2025: ICLR, ARR, ICCV REVIEWING 2024: ICLR **LANGUAGE** Korean: Native

English: Fluent (TOEIC 920)