

Jiwan Chung

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jiwanchung.github.io

Research Interest

My research goal is understanding how knowledge emerges and develops by replicating these processes in machines. Arguably, the most fundamental source of human knowledge lies in perception¹, which forms the basis of how we interpret and learn from the world around us. To reflect this, my current focus is on multimodal artificial intelligence, where I explore challenges that arise from introducing multimodal inputs and outputs to large language models (LLMs).

Education

- 2023-26* **Ph.D.**, Artificial Intelligence, Yonsei University
Advisor: Youngjae Yu
- 2019-23 **M.S.**, Computer Engineering, Seoul National University
Advisor: Gunhee Kim
- 2014-18 **B.Sc.**, Computer Science and Philosophy, Yonsei University
Double Major

Publications

 Google Scholar

† → Equal contribution

- ***Towards Visual Text Design Transfer Across Languages***
Jiwan Chung†, Yejin Cho†, Sumin Shim, Giyeong Oh, Youngjae Yu
Advances in Neural Information Processing Systems, Datasets and Benchmarks 2024
- ***Selective Vision is the Challenge for Visual Reasoning: A Benchmark for Visual Argument Understanding***
Jiwan Chung†, Sungjae Lee†, Minseo Kim, Seungju Han, Ashkan Yousefpour, Jack Hessel, Youngjae Yu
Proceedings of the Conference on Empirical Methods in Natural Language Processing 2024
- ***Can visual language models resolve textual ambiguity with visual cues? Let visual puns tell you!***
Jiwan Chung, Seungwon Lim, Jaehyun Jeon, Seungbeen Lee, Yu Youngjae
Proceedings of the Conference on Empirical Methods in Natural Language Processing 2024
- ***Language models as compilers: Simulating pseudocode execution improves algorithmic reasoning in language models***
Hyungjoo Chae, Yeonghyeon Kim, Seungone Kim, Kai Tzu-iunn Ong, Beong-woo Kwak, Moohyeon Kim, Seonghwan Kim, Taeyoon Kwon, Jiwan Chung, Youngjae Yu
Proceedings of the Conference on Empirical Methods in Natural Language Processing 2024

¹<https://plato.stanford.edu/entries/epistemology/#SourKnowJust>

*Expected.

- **HyperCLOVA X Technical Report**
Kang Min Yoo, Jaegeun Han, Sookyo In, Heewon Jeon, Jisu Jeong, Jaewook Kang, Hyunwook Kim, Kyung-Min Kim, Munhyong Kim, Sungju Kim, HyperCLOVA X Team
arXiv preprint arXiv:2404.01954 2024
- **Do LLMs Have Distinct and Consistent Personality? TRAIT: Personality Testset designed for LLMs with Psychometrics**
Seungbeen Lee, Seungwon Lim, Seungju Han, Giyeong Oh, Hyungjoo Chae, **Jiwan Chung**, Minju Kim, Beong-woo Kwak, Yeonsoo Lee, Dongha Lee
arXiv preprint arXiv:2406.14703 2024
- **CANVAS: Commonsense-Aware Navigation System for Intuitive Human-Robot Interaction**
Suhwan Choi, Yongjun Cho, Minchan Kim, Jaeyoon Jung, Myunchul Joe, Yubeen Park, Minseo Kim, Sungwoong Kim, Sungjae Lee, Hwiseong Park, **Jiwan Chung**, Youngjae Yu
arXiv preprint arXiv:2406.14703 2024
- **VLIS: Unimodal Language Models Guide Multimodal Language Generation**
Jiwan Chung, Youngjae Yu
Proceedings of the Conference on Empirical Methods in Natural Language Processing 2023
- **Reading Books is Great, But Not if You Are Driving! Visually Grounded Reasoning about Defeasible Commonsense Norms**
Seungju Han, Junhyeok Kim, Jack Hessel, Liwei Jiang, **Jiwan Chung**, Yejin Son, Yejin Choi, Youngjae Yu
Proceedings of the Conference on Empirical Methods in Natural Language Processing 2023
- **Long Story Short: a Summarize-then-Search Method for Long Video Question Answering**
Jiwan Chung, Youngjae Yu
British Machine Vision Conference 2023
- **Fusing pre-trained language models with multimodal prompts through reinforcement learning**
Jiwan Chung[†], Youngjae Yu[†], Heeseung Yun, Jack Hessel, Jae Sung Park, Ximing Lu, Rowan Zellers, Prithviraj Ammanabrolu, Ronan Le Bras, Gunhee Kim
Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition 2023
- **Acav100m: Automatic curation of large-scale datasets for audio-visual video representation learning**
Jiwan Chung[†], Sangho Lee[†], Youngjae Yu, Gunhee Kim, Thomas Breuel, Gal Chechik, Yale Song
Proceedings of the IEEE/CVF International Conference on Computer Vision 2021
- **Transitional adaptation of pretrained models for visual storytelling**
Jiwan Chung[†], Youngjae Yu[†], Heeseung Yun, Jongseok Kim, Gunhee Kim
Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition 2021
- **Character grounding and re-identification in story of videos and text descriptions**
Youngjae Yu, Jongseok Kim, Heeseung Yun, **Jiwan Chung**, Gunhee Kim
European Conference on Computer Vision 2020

Work Experience

2023 Fall Research Intern, Naver
2024 Spring Research Intern, LG AI Research

Last updated: October 3, 2024