Hyunwoo Kim

hyunwookim.com

RESEARCH INTEREST

Natural language processing inspired by human cognition. I'm interested in taking an interdisciplinary approach to my research, connecting natural language processing and psychology. In particular, I like to distill insights from social cognition into models for reasoning. Currently, my research centers on the social reasoning capabilities of large language models, such as theory of mind.

EDUCATION

Seoul National University

Seoul, Korea

Ph.D. in Computer Science and Engineering; GPA: 4.24 / 4.3 (4.0 / 4.0)

Mar 2019 - May 2023

Advisor: Gunhee Kim

Thesis: Towards Conversational Agents with Social Cognition and Commonsense

Committee: Seung-won Hwang, Gunhee Kim, Byung-gon Chun, Minjoon Seo, and Yejin Choi

Yonsei University Seoul, Korea Mar 2012 - Feb 2018

B.A. in Psychology & B.S. in Computer Science; GPA: 4.20 / 4.3 (3.98 / 4.0)

Compulsory military service in the Republic of Korea Air Force (2013-2015)

EXPERIENCE

Allen Institute for AI Seattle, United States

Young Investigator (Postdoctoral Researcher) Jun 2023 - Current

Working on social reasoning capabilities of large language models, advised by Yejin Choi

Research Intern Oct 2021 - May 2023

Worked on social commonsense and dialogues, advised by Yejin Choi

NAVER Seongnam, Korea

Research Intern

Worked on exploration in reinforcement learning, advised by Ji-hoon Kim

SNU Institute for Industrial Systems Innovation

Assistant Researcher Mar 2018 - Nov 2018

Worked on summarization for online forum texts, advised by Gunhee Kim

Seoul, Korea Coupang

Software Engineering Intern Winter 2016

Worked on Immutable Infrastructure and Continuous Integration

PUBLICATION (* Denotes equal contribution)

PREPRINTS

Is this the real life? Is this just fantasy? The Misleading Success of Simulating Social Interactions With LLMs *arXiv* 2024

Xuhui Zhou, Zhe Su, Tiwalayo Eisape, Hyunwoo Kim, Maarten Sap

Alpaca against Vicuna: Using LLMs to Uncover Memorization of LLMs

arXiv 2024

Winter 2019

Seoul, Korea

Aly M. Kassem*, Omar Mahmoud*, Niloofar Mireshghallah*, Hyunwoo Kim, Yulia Tsvetkov, Yejin Choi, Sherif Saad, Santu Rana

Deal, or no deal (or who knows)? Forecasting Uncertainty in Conversations using Large Language Models

arXiv 2024

Anthony Sicilia, Hyunwoo Kim, Khyathi Raghavi Chandu, Malihe Alikhani, Jack Hessel

Conferences Can LLMs Keep a Secret? Testing Privacy Implications of Language Models via Contextual Integrity Theory ICLR 2024 Hyunwoo Kim*, Niloofar Mireshghallah*, Xuhui Zhou, Yulia Tsvetkov, Maarten Sap, Reza Shokri, Yejin Choi Spotlight SODA: Million-scale Dialogue Distillation with Social Commonsense Contextualization **EMNLP 2023** Hyunwoo Kim, Jack Hessel, Liwei Jiang, Peter West, Ximing Lu, Youngjae Yu, Pei Zhou, Outstanding Paper Award Ronan Le Bras, Malihe Alikhani, Gunhee Kim, Maarten Sap, and Yejin Choi FANToM: A Benchmark for Stress-testing Machine Theory of Mind in Interactions **EMNLP 2023** Hyunwoo Kim, Melanie Sclar, Xuhui Zhou, Ronan Le Bras, Gunhee Kim, Yejin Choi, and Maarten Sap Oral presentation ProsocialDialog: A Prosocial Backbone for Conversational Agents **EMNLP 2022** Hyunwoo Kim*, Youngjae Yu*, Liwei Jiang, Ximing Lu, Daniel Khashabi, Gunhee Kim, Yejin Choi, and Maarten Sap Perspective-Taking and Pragmatics for Generating Empathetic Responses Focused on Emotion Causes **EMNLP 2021** Hyunwoo Kim, Byeongchang Kim, and Gunhee Kim KLUE: Korean Language Understanding Evaluation NeurIPS Datasets and Benchmarks 2021 Sungjoon Park*, Jihyung Moon*, Sungdong Kim*, Won Ik Cho*, ..., Hyunwoo Kim, ..., Alice Oh**, Jung-Woo Ha**, Kyunghyun Cho** (31 authors) NAACL 2021 How Robust are Fact Checking Systems on Colloquial Claims? Byeongchang Kim*, Hyunwoo Kim*, and Gunhee Kim Will I Sound Like Me? Improving Persona Consistency in Dialogues through Pragmatic Self-Consciousness **EMNLP 2020** Hyunwoo Kim, Byeongchang Kim, and Gunhee Kim Oral presentation Curiosity Bottleneck: Exploration by Distilling Task-Specific Novelty ICML 2019 Youngjin Kim, Hyunwoo Kim*, Wontae Nam*, Ji-hoon Kim, and Gunhee Kim Abstractive Summarization of Reddit Posts with Multi-level Memory Networks NAACL 2019 Byeongchang Kim, Hyunwoo Kim, and Gunhee Kim Oral presentation Workshops Perspective-Taking and Pragmatics for Generating Empathetic Responses Focused on Emotion Causes NeurIPS MiC 2020 Hyunwoo Kim, Byeongchang Kim, and Gunhee Kim Contributed talk Public Self-Consciousness for Endowing Dialogue Agents with Consistent Persona ICLR BAICS 2020 Hyunwoo Kim, Byeongchang Kim, and Gunhee Kim Contributed talk Awards

Outstanding Paper Award

SODA: Million-Scale Dialogue Distillation with Social Commonsense Contextualization, EMNLP 2023

SODA: Million-Scale Dialogue Distillation with Social Commonsense Contextualization, EMINLF 2025

Best Doctoral Dissertation Award

Aug 2023

Department of Computer Science and Engineering, Seoul National University

AI Star Scholarship

Yulchon foundation

Outstanding Researcher Fellowship Brain Korea (BK21) FOUR Intelligence Computing, Seoul National University	Mar 2022
Star Student Researcher Award Brain Korea (BK21) FOUR Intelligence Computing, Seoul National University	Feb 2022
NAVER Ph.D. Fellowship Scholarship award, NAVER	Dec 2021
Qualcomm Innovation Fellowship Korea Scholarship award, Qualcomm Korea	Nov 2021
NRF Ph.D. Student Research Funding Next Generation Researcher support program, National Research Foundation (Korea)	Jun 2021
Kwanjeong Scholarship Full tuition and fees for 2 years of graduate studies, Kwanjeong Educational Foundation	2019 – 2020
Best Presentation Award Korean Society for Brain and Neural Sciences, 23rd KSBNS conference	Nov 2020
National Excellence Scholarship Full tuition and fees for 4 years of undergraduate studies, Korean Student Aid Foundation (KOSAF)	2012 – 2018
Commendation For excellence in mission, the 3rd Air Defense Artillery Brigade Commander, Republic of Korea Air Force	Feb 2015

ACADEMIC SERVICE

- 2023 ICML Theory of Mind Workshop Organizing Committee: Organizer
- 2022 NAACL Organizing Committee: Volunteer Coordinator
- Reviewer: ACL, EMNLP, NAACL, EACL, ACL Rolling Review, NeurIPS, ICLR, ICML
- Teaching Assistant at Seoul National University: Discrete Mathematics, Probablistic Graphical Models, Introduction to Deep Learning, Introduction to Artificial Intelligence, Computer Vision