Gi-Cheon Kang

CONTACT INFORMATION 205, Building 942

Seoul National University

1, Gwanak-ro, Gwanak-gu, Seoul 08826, Republic of Korea

EDUCATION

Seoul National University, Seoul, Korea

Ph.D. Student in Artificial Intelligence

Advisor: Prof. Byoung-Tak Zhang

Seoul National University, Seoul, Korea

M.S. in Cognitive Science Mar. 2018 - Feb. 2020

Advisor: Prof. Byoung-Tak Zhang

Ajou University, Suwon, Korea

B.S. in Software and Computer Engineering

INTERESTS

Machine Learning, Natural Language Processing, Computer Vision

PUBLICATIONS [5] Reasoning Visual Dialog with Sparse Graph Learning and Knowledge Transfer

Gi-Cheon Kang, Junseok Park, Hwaran Lee, Byoung-Tak Zhang*, and Jin-Hwa Kim* Findings of the Empirical Methods in Natural Language Processing (Findings of EMNLP), 2021

[4] Attend What You Need: Motion-Appearance Synergistic Networks for Video Question Answering Ahjeong Seo, Gi-Cheon Kang, Joonhan Park, and Byoung-Tak Zhang

Annual Meeting of the Association for Computational Linguistics (ACL), 2021

[3] Label Propagation Adaptive Resonance Theory for Semi-Supervised Continuous Learning

Taehyeong Kim, Injune Hwang, Gi-Cheon Kang, Won-Seok Choi, Hyunseo Kim, Byoung-Tak Zhang IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2020

[2] Dual Attention Networks for Visual Reference Resolution in Visual Dialog

Gi-Cheon Kang, Jaeseo Lim, and Byoung-Tak Zhang

Empirical Methods in Natural Language Processing (EMNLP), 2019

[1] Contextualized Bilinear Attention Networks

Gi-Cheon Kang, Seonil Son, and Byoung-Tak Zhang ECCV Workshop on VizWiz Challenge, (ECCVW), 2018

RESEARCH **EXPERIENCE**

AI Institute for SNU (AIIS)

Seoul, Korea

Summer 2020 - Present

email: chonkang@snu.ac.kr

website: gicheonkang.com

Sept. 2020 – Present

Mar. 2011 - Feb. 2018

Research Assistant

Advisor: Prof. Byoung-Tak Zhang

I have studied "grounded language learning" which aims to connect language to non-linguistic experiences such as sensory perception and action.

SNU-NAVER Hyperscale AI Center

Seoul, Korea

Student Researcher

Summer 2021 - Present

Working on the multi-agent systems that perform the grounded collaborative dialogue.

^{*:} equal contribution

SK Telecom AI CenterResearch Intern

Seoul, Korea

Spring 2020

With Jin-Hwa Kim and Hwaran Lee

Developed Sparse Graph Learning (SGL) algorithm that discovers inherently sparse semantic structures of the human conversation. Published at Findings of EMNLP 2021.

Seoul National University (SNU)

Seoul, Korea

Research Assistant

Mar. 2018 – Feb. 2020

Advisor: Prof. Byoung-Tak Zhang

Studied the machine learning algorithms for the visually-grounded dialogue systems. We proposed Dual Attention Networks for the question disambiguation and visual groundings. Published at EMNLP 2019.

HONORS &	Best Paper Award @ Korea Software Congress (KSC)	Dec. 2019
AWARDS	Ranked 3rd Place, Visual Dialog Challenge @ CVPR 2019	June 2019
	Software-Centered University Hackathon, Prize from Microsoft Korea	Sept. 2017
	Yeoju Honor Scholarship	May 2016

RESEARCH PROJECTS

Video Turing Test (VTT): The Video Turing Test desires to test a machine's ability of intelligent behavior in regards to observing and understanding video input and thereby its video intelligence. A machine capable of this task would prove human-like video understanding capabilities that could open the world of AI to a whole new possibilities in human-like long-term adaptive learning.

Machine Learning for Home Appliances, LG Electronics: Industry-Academia Cooperative Research with LG Electronics. Optimizing a motor control of an electric washing machine using ML technique.

INVITED	Dual Attention Networks for Visual Reference Resolution in Visual Dialog	
TALKS	ICCV 2019 - Video Turing Test Workshop (Spotlight)	Nov. 2019
	SK Telecom AI Center	Sept. 2019

EXTRA	BI Lab Conference Deadline Site Administrator	2018 – Present
CURRICULAR	Military Service in Republic of Korea Army	2012 - 2014
ACTIVITIES	•	