

Sungjin Park

NATURAL LANGUAGE PROCESSING & ARTIFICIAL INTELLIGENCE

✉ sungjin.park@navercorp.com | 🏠 [ecpark4545.github.io/chadstone/about/](https://github.com/ecpark4545) | 📄 [ecpark4545](#)

Education

Korea University

M.S. IN COMPUTER SCIENCE AND ENGINEERING

Seoul, South Korea

Sep. 2019 - Aug. 2021

Konkuk University

B.S. IN APPLIED STATISTICS

Seoul, South Korea

Mar. 2011 - Aug. 2019

Publications

INTERNATIONAL JOURNAL

Multi-View Attention Network for Visual Dialog

Sungjin Park, Taesun Whang, Yeochan Yoon, Heuiseok Lim

Applied Sciences 11.7 (2021). 2021

INTERNATIONAL CONFERENCE

Two Heads are Better than One? Verification of Ensemble Effect in Neural Machine Translation

Chanjun Park, Sungjin Park, Seolhwa Lee, Taesun Whang, Heuiseok Lim

ACL/w, 2021

Self-Supervised Korean Spelling Correction via Denoising Transformer

Chanjun Park, Sungjin Park, HeuiSeok Lim

International Conference on Information, System and Convergence applications, 2020

DOMESTIC CONFERENCE

Semi-supervised GPT2 for News Article Recommendation with Curriculum Learning

Jaehyung Seo, Dongsuk Oh, Sugyeong Eo, Sungjin Park, Heuiseok Lim

The 32th Annual Conference on Human Cognitive Language Technology, 2020

MMA: Multi-modal Message Aggregation for Korean VQA

Sungjin Park, chanjun Park, Jaehyung Seo, Heuiseok Lim

The 32th Annual Conference on Human Cognitive Language Technology, 2020

BOOKS

Natural Language Processing Bible

HeuiSeok Lim, NLP & AI lab

Human Science, 2020

Patents

APPRATUS, METHOD AND SYSTEM FOR PROCESSING DIALOGUE WITH REGARD TO IMAGE

Sungjin Park, Heuiseok Lim

KR Patent 10-2020-0113990. June, 2020

MULTI-MODAL MESSAGE AGGREGATION FOR KOREAN VISUAL QUESTION ANSWERING

Sungjin Park, Heuiseok Lim

KR Patent 10-2020-0158989. Nov, 2020

Research Experience

Text Guided Image Manipulation

FULL-TIME RESEARCHER IN KOREA UNIV

Seoul, South Korea

Jan. 2021 - Current

- Developing a Text-guided Image manipulation model that takes the source image and target text as input and transforms the source image based on the target text.
- Under the joint supervision of a Professor Heuiseok Lim and Professor Seungryong Kim from Korea University.

Analysis on Question Understanding in QA systems

Seoul, South Korea

FULL-TIME RESEARCHER IN KOREA UNIV

Dec. 2020 - May. 2021

- To reveal the comprehension level of the pre-trained models on the question, we propose Controlled dataset in which the questions convey different syntax, semantics or intents.
- Under review.

Visual Dialog

Seoul, South Korea

FULL-TIME RESEARCHER IN KOREA UNIV

Feb. 2020 - Feb. 2021

- Developed an encoder-decoder model that leverages multiple views about heterogeneous inputs based on attention mechanisms.
- Under the supervision of a Professor Heuseok Lim from Korea University.
- ([Project link](#)).

Korean Spelling Correction

Seoul, South Korea

FULL-TIME RESEARCHER IN KOREA UNIV

Nov. 2019 - Feb. 2020

- Most spelling correction models require parallel corpora, including misspelled sequences as inputs and ground truth as outputs. To alleviate this limitation, we propose two noise generation methods and Transformer based denoising architecture for the semi supervised Korean spelling correction task.
- Under the supervision of a Professor Heuseok Lim from Korea University.

Extracurricular Activity

V+L paper review

Online(Seoul, South Korea)

CORE MEMBER & PRESENT

Jul. 2020 - May. 2021

- Read and present papers related to Vision and NLP
- Presentation Slides ([link](#)).

Deep Learning based Korean Spelling Correction

Seoul, South Korea

FULL-TIME RESEARCHER IN KOREA UNIV

Oct. 2019. - Nov. 2019

- Development of Korean spelling corrector based on deep learning ([Demo link](#)).

English Free-talking and grammar correction feedback system using NAO robot

Seoul, South Korea

FULL-TIME RESEARCHER IN KOREA UNIV

Jul. 2019 - Oct. 2019

- Development of English Free-talking system and grammar correction feedback system using NAO robot ([Video link](#)).

Tobigs

Seoul, South Korea

10TH MEMBER

Jul. 2018 - Jul. 2019

- BERT based Cloze test; Participated and presented at the 7th ToBigs Conference 2018 ([Project link](#)).
- DR-GAN based radial distortion rectification; Participated and presented at the 8th ToBigs Conference 2019 ([Project link](#)).

Bigcontest 2018

Seoul, South Korea

MEMBER

Aug. 2018 - Sep. 2019

- Participated Bigcontest-Champions League
- Development of a game user churn prediction model using in-game activity data ([Project link](#)).

Teaching Experience

Human-Inspired AI Research Institute

Seoul, South Korea

INSTRUCTOR

June. 2020

- Natural language processing course.
- NLP applications, introduction to CNN, text classification with CNN and Pytorch.

Korea University

Seoul, South Korea

TEACHING ASSISTANT

2020-2021

- (BDC101) Introduction to NLP in Big Data. [Autumn 2020]
- (DFC615) NLP for Digital Finance Engineering. [Spring 2021] ([link](#))
 - Basic NLP (Tokenize, Stemming, POS tagging, etc.)
 - LSTM based Sentence Generation, BERT based sentiment analysis.
 - PLM based MRC.

Research Interests

| | |
|------------------------------|---|
| Vision & Language | V+L Pretrain models, Visual Dialog, Text-guided Image Synthesis |
| QA system and Dialog | VQA, Visual Dialog, Scene Understanding |
| NLP | NER, Prompt-based models (e.g., p-tuning) |
| Computer Vision | GAN, GAN-Inversion, Image Captioning, Visual Feature Clustering |

Skills

Language Python, Hadoop, Spark, Javascript
Frameworks Pytorch, React