

Research Interest

Deep Learning, Natural Language Processing, Large Language Models, Data-Centric Al

Education

Chung-Ang University

Seoul, Korea

Mar. 2023 - Feb. 2025 (Expected)

M.S. in Artificial Intelligence GPA: 4.33 / 4.5

Advisor: Youngbin Kim

Chung-Ang University

Seoul, Korea

Mar. 2017 - Feb. 2023

B.S. in Electrical and Electronics Engineering **GPA:** 3.94 / 4.5 [Certificate] [Transcript]

Research Experience

Research Assistant Advisor: Youngbin Kim

Intelligent Information Processing Lab @ Chung-Ang Univ.

Mar. 2023 - Present

Undergraduate Research Intern Intelligent Information Processing Lab @ Chung-Ang Univ.

Apr. 2021 - Feb. 2023

Advisor: Youngbin Kim

Big Data & Al Lab @ Chung-Ang Univ.

Undergraduate Intern Advisor: Hohyun Park

Jan. 2021 - Feb. 2021

International Publications

Improving the Quality of the Existing Dataset via LLM

Under review.

Domain Generalization for Dataset Synthesization

Under review

Interactive Document Summarization System

Under review.

Constructing Sport Game Conversation Dataset

Under review.

Don't be a Fool: Pooling Strategies in Offensive Language Detection

from User-Intended Adversarial Attacks [Paper]

Seunguk Yu, <u>Juhwan Choi</u> and Youngbin Kim NAACL 2024 Findings

Enhancing Effectiveness and Robustness in a Low-Resource Regime via Decision-Boundary-aware Data Augmentation [Paper]

Kyohoon Jin*, Junho Lee*, Juhwan Choi*, Sangmin Song* and Youngbin Kim

LREC-COLING 2024

Equal contribution as co-first author.

Colorful Cutout: Enhancing Image Data Augmentation with Curriculum Learning [Paper]

Juhwan Choi and Youngbin Kim

ICLR 2024 Tiny Papers

Adverb Is the Key: Simple Text Data Augmentation with Adverb Deletion [Paper]

<u>Juhwan Choi</u> and Youngbin Kim ICLR 2024 Tiny Papers

AutoAugment Is What You Need: Enhancing Rule-based Augmentation Methods in Low-resource Regimes [Paper] [Code]

<u>Juhwan Choi</u>, Kyohoon Jin, Junho Lee, Sangmin Song and Youngbin Kim EACL 2024 Student Research Workshop

GPTs Are Multilingual Annotators for Sequence Generation Tasks [Paper] [Code]

<u>Juhwan Choi</u>, Eunju Lee, Kyohoon Jin and Youngbin Kim EACL 2024 Findings

SoftEDA: Rethinking Rule-Based Data Augmentation with Soft Labels [Paper] [Review] [Code]

<u>Juhwan Choi</u>, Kyohoon Jin, Junho Lee, Sangmin Song and Youngbin Kim ICLR 2023 Tiny Papers
Accepted as notable work with oral presentation.

Generative Data Augmentation via Wasserstein Autoencoder for Text Classification [Paper] [Code]

Kyohoon Jin, Junho Lee, <u>Juhwan Choi</u>, Soojin Jang and Youngbin Kim The 13th International Conference on ICT Convergence

Domestic Publications

텍스트 분류를 위한 Wasserstein Autoencoder를 활용한 생성적 데이터 증강

Kyohoon Jin, Junho Lee, <u>Juhwan Choi</u>, Sangmin Song, Soojin Jang and Youngbin Kim KICS Winter Conference 2024

소프트 라벨을 적용한 규칙 기반 텍스트 데이터 증강 기법 [Paper] [Poster]

<u>Juhwan Choi</u>, Junho Lee, Sangmin Song, Kyohoon Jin and Youngbin Kim 2023 Summer Annual Conference of IEIE

감정 간의 관계를 고려한 지도 대조 학습 기반 감정 인식 [Paper]

Dongje Yoo, Kyunghoon Jeon, <u>Juhwan Choi</u> and Youngbin Kim 2023 Summer Annual Conference of IEIE

KITE: 한국어 고의 오탈자를 활용한 텍스트 데이터 증강 방법론 [Paper]

Seunguk Yu, <u>Juhwan Choi</u>, Heejae Suh, Kyohoon Jin and Youngbin Kim Proceedings of HCI Korea 2023

낯선 데이터를 활용한 과잉신뢰 완화 텍스트 증강 기법 [Paper] [Presentation]

Junho Lee, Sangmin Song, <u>Juhwan Choi</u>, Juhyoung Park, Kyohoon Jin and Youngbin Kim Proceedings of HCI Korea 2023

Semantic Preservation and Natural Language Data Augmentation via Variational Autoencoder [Paper]

Yuchul Shin, Kyohoon Jin, <u>Juhwan Choi</u>, Junho Lee, Soojin Jang and Youngbin Kim TechArt

Variational Autoencoder기반 의미 보존 자연어 데이터 증강 기법 [Paper] [Presentation]

<u>Juhwan Choi</u>, Junho Lee, Kyohoon Jin, Yehoon Jang, Soojin Jang and Youngbin Kim 2022 Summer Annual Conference of IEIE

Research Projects

Multimodal Dataset Generation

Domain Generalization through Dataset Generation

Submitted a paper - under review

Multilingual Data Annotation using LLMs

Submitted a paper and accepted to EACL 2024 Findings.

Nov. 2023 - Present

Nov. 2023 - Present

Text Data Augmentation with Soft Label Submitted a paper and accepted to ICLR 2023 Tiny Papers.	Feb. 2023 - May. 2023
Interactive News Summarization Submitted a paper at demo track.	Jan. 2023 - Present
Decision Boundary-Based Data Augmentation Submitted a paper and accepted to LREC-COLING 2024.	Aug. 2022 - Feb. 2024
Deep Learning Seminar Based on Stanford CS224n and CS231n	Feb. 2022 - Mar. 2022
Text Data Augmentation using Wasserstein Autoencoder Related work research, Implemented text classification model.	Aug. 2021 - Jan. 2022
Implementing Image Captioning Model using Transformers	Apr. 2021 - Jun. 2021
Korean Hate Speech Detection Model Used pre-trained KcELECTRA. Ranked 11/88 (in Dec. 2022) at [Kaggle competition]	Apr. 2021 - May. 2021
Deep Learning Seminar Based on CMU 11-785	Jan. 2021 - Feb. 2021

Honors & Awards

Travel Grant @ ICLR 2024

Skills

Programming Languages Familiar: Python | C | C++

Experienced: Matlab

Libraries & Tools Pytorch | HuggingFace | Numpy | Pandas | Git | CLI

Language Proficiency Native: Korean

Fluent: English [TOEIC 955] [TEPS 409]

Services.

Reviewer ACL Rolling Review (From 2023 August)

EACL 2024 NAACL 2024 ACL 2024

ICLR 2024 Tiny Papers

Relevant Coursework

Graduate Level

Artificial Intelligence Deep Unsupervised Learning | Deep Generative Model | Graph Neural Networks | Advanced Natural Language Processing | Artificial Intelligence Literacy | Ethics and Fairness in Artificial Intelligence

Undergraduate Level

Computer Science Algorithms | Artificial Intelligence | Basic Computer Programming | Computer Architecture | Data Structure | Digital Image Processing | Internet of Intelligent Things | Logic Circuit | Microcomputer Systems | Mobile Network | Numerical Analysis | Object-Oriented Programming | Operating Systems

Mathematics Calculus 1 | Calculus 2 | Electric Mathematics | Engineering Mathematics | Linear Algebra | Random Variables