# SangYeon Cho

\( \cdot +82 \) 10 4618 8508 \( \to \) whtkddus98@gmail.com \( \beta \) Website \( \mathcal{G} \) Github

🟥 Master of Science in Engineering @ Department of AI, Chung-Ang University, Seoul 06964, Republic of Korea

## Welcome!

### "Let's do my best rather than be the best."

Hello, I'm Cho Sangyeon. I am currently a master's degrees at Chung-Ang University in Korea. I am interested in the fields of machine learning and deep learning engineers.

## Research Interests \_\_\_\_\_

- · Deep Learning
- Natural Language Processing
- Knowledge Distillation
- Multi-modal Representation Learning

# **Education**

# MS Chung-Ang Univ, Al Engineering

2023.03 - 2025.02

- Coursework: Multi-modal Learning, Knowledge Distillation
- Advisor: Prof. Jungyeong Kim(Labs ☑)
- Graduation Thesis

#### **BS** Kookmin Univ, Software Engineering

2017.03 - 2023.02

- · Coursework: Algorithms, Data Structure, Artificial Intelligence
- Graduation Work

## **Publications**

## Improving Multimodal Data Quality with Unified Filtering Score (UF-Score)

2024.12

Sangyeon Cho, Mingi Kim, Hwang JinKwon, Jaehoon Go, Junyeong Kim\*

Association for the Advancement of Artificial Intelligence (AAAI) GoodData, 2025

# Multi2Cap: Improving Automated Audio Captioning with Cross-modal Feature Distillation and Large Language Model

2024.11 Under Review

Sangyeon Cho, Jangyeong Jeon, Mingi Kim, Jaeho Han, Junyeong Kim\*

Annual Conference of the Nations of the Americas Chapter of the Association for Computational Linguistics (NAACL), 2025

# Synergy-CLIP: Extending CLIP with Multi-modal Integration for Robust Representation Learning

2024.09 Under Review

 $\textbf{\textit{Sangyeon Cho}}, \textbf{\textit{Jangyeong Jeon}}, \textbf{\textit{Mingi Kim}}, \textbf{\textit{Junyeong Kim}}^{\star}$ 

IEEE ACCESS, 2024

# BioBridge: Unified Bio-Embedding with Bridging Modality in Code-Switched EMR

2024.08

 ${\sf Jangyeong\,Jeon}, \textbf{\textit{Sangyeon Cho}}, {\sf Dongjoon\,Lee}, {\sf Changhee\,Lee}, {\sf Junyeong\,Kim^*}$ 

IEEE ACCESS, Volumn 12, 2024

# DSG-KD: Knowledge Distillation from Domain-Specific to General Language Models

Sangyeon Cho, Jangyeong Jeon, Dongjoon Lee, Changhee Lee, Junyeong Kim\*

IEEE ACCESS, Volumn 12, 2024 🗹

# ConCSE: Unified Contrastive Learning and Augmentation for Code-Switched Embeddings

2024.07

2024.08

Jangyeong Jeon, **Sangyeon Cho**, Minuk Ma, Junyeong Kim\*

IEEE International Conference on Pattern Recognition (ICPR)

# A pediatric emergency prediction model using natural language process in the pediatric emergency department

2024.06 Under Review

Arum Choi, Chohee Kim, Jisu Ryoo, Jangyeong Jeon, **Sangyeon Cho**, Dongjoon Lee, Junyeong Kim, Changhee Lee\*, Woori Bae\*

Nature Scientific Reports, 2024

# **Experience** \_

### Lablup Inc., AI Research Assistants

Seoul, Korea 2022.06 – 2022.09

- Contribute to the research team
- Developed ground truth data pre-processing module
- Predictive modeling of respiratory infectious disease transmission risk based on ground truth data of droplet spread
- · Data augmentation modeling using GAN
- Seminar LINK

# **Projects**

# 119 Intelligent report reception voice recognition data construction

2023.09 - 2024.09

- building data pre-processing and analytics pipeline for speech recognition
- modeling dispatch decision-making for decision aids for guard officers
- · Tools Used: Pyhon, SQL

## **Optical Character Recognition (OCR) model improvements**

2023.04 - 2024.09

- Designed a model to classify emergency and critical patients using emergency department FMR data.
- Pre-trained the language model using clinical notes collected from real hospitals.
- we additionally utilize clinical note (text) information to utilize the most potential information.
- By combining tabular encoder and text encoder at the embedding level, we achieved better performance than existing models.

### **Optical Character Recognition (OCR) model improvements**

2022.09 - 2023.02

- Al Competition Organized by Software Center University
- Using Pororo as a baseline, we improved it by utilizing data augmentation and adding the Mix-Style module.
- As a result, the team ranked at the top of the leaderboard and won an honorable mention.
- Presentation LINK ☑

## AI speakers for seniors living alone

2022.03 - 2022.06

- Designing an AI speaker that analyzes the emotions of seniors living alone and alerts their caregivers
- Responsible for designing/training deep learning models
- We used two models: Sentiment Classification Model and Sentiment Conversation Model.

## **Research on Meta-Learning Improvement**

- Studying/implementing meta-learning in general
- Considered how to improve Model-Agnostic Meta-Learning (MAML) under the guidance of a professor
- Conducted research on applying MAML to natural language processing by combining it with pruning and knowledge distillation

# **Research on Improving Information Security Behavior**

2020.10 - 2022.04

- Developing a framework to guide better information security compliance behavior in the enterprise
- Teach principal investigators programming fundamentals
- Teach principal investigators on machine learning and deep learning concepts

# Awards & Honors \_\_\_\_\_

#### **Awards**

	<del></del>	
	IEIE Summer Conference, Encouragement Award	2024.06
	SW-focused University Collaborative AI Competition, Encouragement Award	2022.09
Hono	rs	
	Merit Scholarships	2022.09
	Merit Scholarships	2022.03
	S&T Foundation Scholarships	2022.02

# Technologies \_\_\_\_\_

Languages: Python, C/C++, C#, Java, SQL, Scala

Credentials: ADsP