# Yoonjeong Park

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## RESEARCH INTERESTS

(Singing) Voice Conversion, Audio Synthesis, Speech Recognition, Text-guided Image Generation

## **EDUCATION**

Mar.2019 Yonsei University

Seoul, Korea

- Aug.2024 B.S in Computer Science, overall GPA: 3.8/4.3 [CS] 3.96 /4.3

Recipient of scholarship 2022-1 GPA: 4.24/4.3

Jan.2023 University of British Columbia

Vancouver, Canada

- April.2023 Exchange Student in Computer Engineering

Relevant Course: Topics in Computer Engineering – deep learning

## **PUBLICATIONS**

†: Corresponding author, \*: Equal contribution

# [1] Can Separators Improve Chain-of-Thought Prompting? | paper

Yoonjeong Park\*, Hyunjin Kim\*, Chanyeol Choi, Junseong Kim†, Jy-yong Sohn† (*Under Review*)

# **INDUSTRY EXPERIENCE**

Sep.2023 - **Linq company** 

Cambridge, Massachusetts, United States (REMOTE)

**PRESENT** 

Research Intern

- · Advised by Prof. Jy-yong Sohn, Dr. Junseong Kim
- · Led a project focused on enhancing Chain-of-Thought prompting
- · Proposed and developed a novel method "CoT-Sep" to help Large Language Models (LLMs) understand their thought processes better while reasoning.

Jun.2021 - **ESOL company** 

Hwaseong City, Korea

Jan.2022

R&D Center, Intern

- · Participated in development of EUV inspection equipment which use detection model to detect defection in image dataset
- · Managed and coordinated the outsourcing company's requirements and presented performance of developed model bi-weekly

# RESEARCH EXPERIENCE

Jun.2021 - Undergraduate Research Assistant at Cyber Security Lab.

Aug.2021

- · Participated in research project of reverse engineering using GNN to predict function name from kernel binary code
- · Analyzed baseline paper <u>NERO</u>'s data pre-processing code and found out limitations to use it for our dataset
- · Implemented pre-processing code for our dataset based on NERO's data pre-processing code

#### **RELATED COURSES**

AI Convergence Practice (A+), Linear Algebra and its application (A+), Big Data (A+), Computer Vision (A+), Topics in Computer Engineering-Deep Learning (P/B+), Probability and Statistics (A+)

# **PROJECTS**

Oct. 2023 - Speech Recognition for Korean Dialect | Github Repo

Dec. 2023 Developed a specialized speech recognition model for Korean regional Dialect

- · Preprocessed Korean Dialect dataset from AI hub and trained Deepspeech2 model using open-source toolkit, kospeech
- · Achieved model performance comparable to that of Faster Whisper on test dataset reducing CER (Character Error Rate) to 0.2

Jan. 2024 - Real-Time Multilingual Chatbot for Gaming Github Repo

Feb. 2024 Developed a discord bot for a real-time STT-translate-TTS

- Enhanced STT performance on streaming audio using AWS transcribe
- · Implemented a discord bot to send translated text to users for TTS

Mar. 2022 - Auto White Balance for Multi-illuminant | Github Repo

May. 2022 Researched and enhanced Auto White Balance models for multi-illuminant scenes

- · Modified U-Net3+ to perform regression task per pixel and improved performance compared to the baseline U-Net model
- · Conducted extensive research on vision transformer models for AWB task and trained Swin-UperNet model and evaluated its performance in comparison to U-Net and U-Net3+ models

Mar. 2023 - Re-implement Resnet for CIFAR-10 | Github Repo

April. 2023 Reimplemented Resnet and reproduced experimental results in the original paper

- · Implemented and optimized Resnet20, 56 and Plain20, 56-layer Net from scratch
- · Presented results in the report written in NeurIPS conference format

## **COMPETITIONS & AWARDS**

Jan.2023 Certificate of Excellence Ling company

Awarded as R&D intern

Oct.2023 - Special Awards 2023 Software University AI Competition

Dec.2023 Developed AI Model for Satellite Image Building Area Segmentation / Github Repo

July.2023 - 10<sup>th</sup> place / 110 teams 2023 Korean Language Competition

Oct.2023 Developed specialized speech recognition Model for Elderly people and children

## SKILLS LANGUAGES

· Deep Learning: Pytorch

· Data Science: Numpy, R

· System Admin: Docker

· Version Control: Git

· Operating System: Linux, macOS, windows

· Korean: Native

· English: TOEFL iBT 102

· Python, C++, Java, MySQL, PostgreSQL

(\* in the order of fluency)

## **EXTRACURRICULAR ACTIVITIES**

2023 - YAI (Yonsei Artificial Intelligence Club at Computing College)

PRESENT Leading Industry Collaboration as Vice President

· Conducted Speech, Generative models <u>paper review</u> study

· Participated in Vision and Language Multimodal paper review study

2020 - **PoolC** (Programming Club at Engineering College)

PRESENT Led basic algorithm study, machine learning study

· Participated in Transformer, Computer Vision paper review study