Yoonjeong Park

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RESEARCH INTERESTS

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

EDUCATION

Mar.2019 - Aug.2024 **Yonsei University** Seoul, Korea
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 - April.2023 **University of British Columbia** Vancouver, Canada
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 - PRESENT **Linq company** Cambridge, Massachusetts, United States (REMOTE)
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 - Jan.2022 **ESOL company** Hwaseong City, Korea
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 - Aug.2021 **Undergraduate Research Assistant at Cyber Security Lab.**
- Participated in research project of reverse engineering using GNN to predict function name from kernel binary code
- Analyzed baseline paper NERO'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 - Dec. 2023 **Speech Recognition for Korean Dialect | Github Repo**
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 - Feb. 2024 **Real-Time Multilingual Chatbot for Gaming| Github Repo**
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 - May. 2022 **Auto White Balance for Multi-illuminant | Github Repo**
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 - April. 2023 **Re-implement Resnet for CIFAR-10 | Github Repo**
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** *Linq company*
Awarded as R&D intern

Oct.2023 - Dec.2023 **Special Awards** *2023 Software University AI Competition*
Developed AI Model for Satellite Image Building Area Segmentation | **Github Repo**

July.2023 - Oct.2023 **10th place / 110 teams** *2023 Korean Language Competition*
Developed specialized speech recognition Model for Elderly people and children

SKILLS

- Deep Learning: Pytorch
- Data Science: Numpy, R
- System Admin: Docker
- Version Control: Git
- Operating System: Linux, macOS, windows

LANGUAGES

- Korean: Native
- English: TOEFL iBT 102
- Python, C++, Java, MySQL, PostgreSQL
  (* in the order of fluency)

EXTRACURRICULAR ACTIVITIES

2023 - PRESENT **YAI (Yonsei Artificial Intelligence Club at Computing College)**
- Leading Industry Collaboration as Vice President
- Conducted Speech, Generative models paper review study
- Participated in Vision and Language Multimodal paper review study

2020 - PRESENT **PoolC (Programming Club at Engineering College)**
- Led basic algorithm study, machine learning study
- Participated in Transformer, Computer Vision paper review study