Soohwan Kim

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OBJECTIVE

Ambitious A.I. research engineer with 2+ years experience in speech and natural language processing fields. Currently, co-founder of a tech startup named TUNiB, research interests includes speech and natural language processing, and MLOps. In particular, recently been very interested in large-scale language model training and big-data processing.

EDUCATION

Kwangwoon University

Mar. 2014 - Feb 2021

Bachelor of Engineering in Electronics and Communication

Seoul, South Korea

RESEARCH EXPERIENCE

Spoken Language Lab (Sogang Univ.)

Mar 2020 - Aug 2020

Mapo, Seoul

Undergraduate Researcher

• Advisor: Prof. Ji-Hwan Kim

Research and develop latest end-to-end speech recognition technology.

Professional Experience

TUNiB Inc. Mar 2021 - Present Gangnam, Seoul

Co-founder/A.I. Engineer

• Co-founded with former Kakao Brain team members.

• Developing large-scale language model and open-domain dialogue system.

- Lead the development of the TUNiB Electra model, data construction, modeling, and experimental design.
- 1st ranked in the 2021 AI Online Competition, attracting 300 million won worth of subsidies.

Aug 2020 - Feb 2021 Kakao Brain Corp. Pangyo, Gyunggi

A.I. Engineer

• Team leader: Kyubyong Park

• Developed a open-source natural language processing library named pororo

• Developed multilingual TTS technology. Demo page: https://pororo-tts.github.io/

• Research and develop latest speech and natural language processing technologies.

• Developed English, Chinese, and Korean speech recognition using Wav2vec 2.0 technology.

PROJECT EXPERIENCE

Open-domain Dialogue System | NLP, DeepSpeed, Transformers, Megatron-LM

Apr 2021 - Present

- Research and develop various versions of chatbots.
- Participate in the development of all overall systems from data construction to big model training.

TUNIB Electra | NLP, Transformers, Tokenizers, TPU, Google Cloud Platform

Aug 2021 - Sep 2021

- Released two version of ELECTRA models. (Korean-English bilingual model, Korean-only model).
- Conducted performance comparison experiments between several tokenizers made using the Tokenizers library.

Pororo | NLP, ASR, TTS, Fairseq, PyTorch

Aug 2020 - Feb 2021

- Library that can solve more than 30 natural language processing tasks in just 3-4 lines with pre-trained models.
- Developed speech related modules. (Automatic Speech Recognition, Text To Speech)

OpenSpeech/KoSpeech | ASR, PyTorch-Lightning, Hydra

Jan 2020 - Jun 2021

- Framework that enables easy creation of speech recognition models of various models and various languages.
- Dozens of models including Transformers, ContextNets, Transformers, and Listen Attend Spell.

Awards & Honors

- 2021.08 NIPA President's Award (1st ranked), 2021 AI Online Competition
- 2020.11 President's Award (1st ranked) & People's Choice Award, Kwangwoon Engineering Festival
- 2020.10 3rd ranked, 2020 AI Grand Challenge Speech Recognition Track
- 2019.10 Finalist (12th Ranked), Naver AI Hackathon Speech
- 2019.04 People's Choice Award, Kwangwoon University Software Start-up Idea Contest
- 2018.08 Outstanding Award, Samsung Multi-Campus