# Kang-wook Kim

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## **SUMMARY**

I'm ECE undergraduate student in Seoul National University. I work as Senior Al Scientist in MINDsLab. My research interest lies in speech synthesis and generative models.

My goal is to make user-friendly AI services or techniques which can benefit humans. I always focus on improving the usability of my AI model from the user's point of view, and I love these works.

#### **EXPERIENCE**

MINDsLab Inc.

Mar. 2020 – Now
Senior Al Scientist

Pangyo, Kyeonggi

- Worked as the **leader of speech synthesis team**, making **Text-to-Speech (TTS) architectures and training recipes** that were widely used such as the donation system of Twitch, weather forecast, and Al Human.
- Developed robust TTS system to generate **long sentences**, which can generate a **maximum of 10 minutes of speech**.
- Developed pronunciation evaluation engine for foreigners with the **extremely small dataset (4hrs, 12 speakers)**, which achieved **88% accuracy** for unseen speaker's dataset.
- Improved the sound quality of the voice conversion system, which achieved **mean opinion scores (3.91, 3.86)** in **naturality and speaker similarity** comparable to ground-truth (4.14, 3.94).

#### **EDUCATION**

## **Seoul National University**

B.S. in Electronical and Computer Engineering (GPA: 3.92/4.30)

Mar. 2018 - Now

Seoul, Korea

## RESEARCH

#### Workshop

• Kang-wook Kim and Junhyeok Lee, "Controllable and Interpretable Singing Voice Decomposition via Assem-VC," Accepted to *NeurIPS Workshop on ML for Creativity and Design 2021* (Oral)

## Preprint

• Kang-wook Kim, Seung-won Park, Junhyeok Lee, and Myun-chul Joe, "Assem-VC: Realistic Voice Conversion by Assembling Modern Speech Synthesis Techniques," Submitted to ICASSP 2022 (To be announced)

#### **OPEN SOURCE CONTRIBUTION**

Assem-VC - voice conversion system (Stars: 153): Official repository of our paper.

UnivNet - vocoder (Stars: 103): I reproduced the results in the paper while official implementation is unavailable.

#### **HONORS and AWARDS**

- Presidential scholarship on informatics 2018 2023, fully funded scholarschip for undergrad course
- Hanseong Sonjaehan Scholarship 2016 2017, 5M KRW per year
- Korea Olympiad in Informatics (KOI) Gold (4th place) at 2015; Silver, Bronze at 2014, 2011.
- Completion of winter school for International Physics Olympiad (IPhO) candidates 2015, 2016