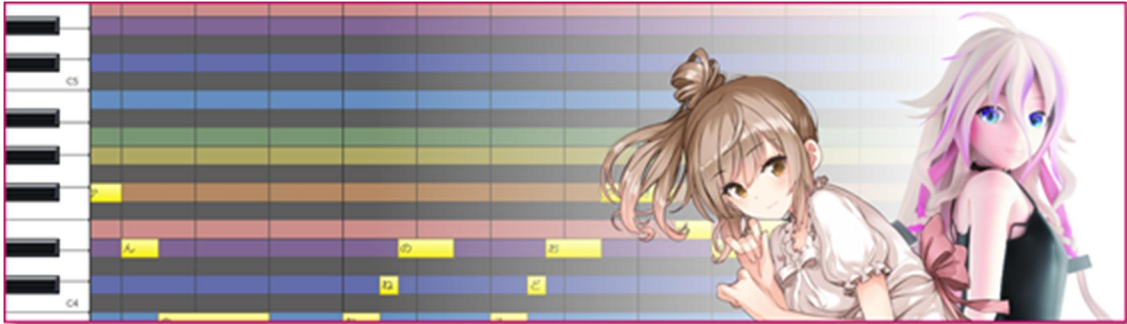


14th December 2018
Techno-Speech, Inc.

Reproducing high-quality singing voice with state-of-the-art AI technology



Techno-Speech, Inc. and Nagoya Institute of Technology Speech and Language Processing Laboratory recently developed a singing voice synthesis technology that can reproduce human voice quality, unique characteristics, and singing style more precisely than ever.

Techno-Speech, Inc. and Nagoya Institute of Technology are collaborating on the research and development of speech/singing-voice synthesis technology. The technologies they have developed so far have already been applied in the commercial karaoke system "JOYSOUND," voice creation software "CeVIO Creative Studio," and elsewhere. In this research, a singing-voice database of about two hours of singing recorded by a specific singer is used to develop human voice quality, unique characteristics, and singing style by applying AI technology such as deep learning. When synthesizing, high-quality singing voices can be produced simply by entering any musical score with lyrics.

Listen here

<https://www.techno-speech.com/news-20181214a-en>

Languages: Japanese, English, Chinese

Singing samples: New technology (mix and a cappella)

Current technology (a cappella)

Input: Musical score with lyrics that has not been manually adjusted

* Singing voice database providers

Japanese: CeVIO Project "Sato Sasara"

<http://www.cevio.jp/>

English: 1st PLACE co., Ltd. "IA" (Voice source: Lia)

<http://1stplace.co.jp/ia/world/>

This research is based on a joint research project between Techno-Speech, Inc. and Nagoya Institute of Technology. The research results will be presented at a spring meeting of the Acoustical Society of Japan held in March 2019. Possible applications of this technology include the followings.

- ü Reproduction of artist's singing voice (including that of a deceased person)
- ü Usage in music production and game development
- ü Video streaming/live events conducted by virtual YouTubers
- ü Post-recording system for virtual actors
- ü Vocalization module of AI or speech dialogue systems
- ü Generation of flexible reference speech for foreign language/singing education
- ü Speech devices for ALS or laryngeal cancer patients
- ü Digital signage for nursing facility

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