YUYA YAMAMOTO

yamathcy.github.io
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RESEARCH INTERESTS

Music information retrieval
- Singing voice processing/transcription
- Musical audio identification
- Musical audio synthesis

Audio analysis
- Low-resource audio/speech identification
- Environmental sound analysis/identification

EDUCATION

Ph.D (Informatics) **Apr 2021 - Present**
Graduate School of Comprehensive Human Science, University of Tsukuba
Supervisor: Hiroko Terasawa

Master (Informatics) *Apr 2019 - Mar 2021*
Graduate School of Library, Information and Media Studies, University of Tsukuba
Supervisor: Yuzuru Hiraga

Bachelor (Media science) *Apr 2017 - Mar 2019*
The College of Media Arts, Science and Technology, University of Tsukuba
Supervisor: Yuzuru Hiraga

Bachelor (Mechanics) (retired) *Apr 2013 - Mar 2017*
Chuo University

LANGUAGE & TECHNOLOGY SKILLS

Language	**Japanese (native), English (fluent), Korean (entry)**
Programming	**Python, R, JavaScript, C#, C, C++**
Software & Tools	**AWS, Unity, Docker, LaTEX**
Frameworks	**PyTorch, Tensorflow, SpeechBrain, React.JS**

WORK EXPERIENCE

Korea Advanced Institute of Science and Technology (KAIST) *Aug 2022 - Dec 2022*
Visiting student researcher (4 months)
Mentor: Juhan Nam
Worked on deep learning based singing technique analysis from real-world tracks

Sigboost, Inc *Feb 2022 - Mar 2022*
Intern (2 weeks)
Worked on music annotation user interface using React.js

National Institute of Advanced Industrial Science and Technology (AIST)
Aug 2019 - Sep 2019
Intern (4 weeks)

Worked on Singing style analysis and conversion.

CA Techkids *Oct 2017 - Oct 2021*
Intern (4 years)
Worked as a tutor of programming, Unity engineering, and textbook maker (Unity course).

PUBLICATIONS (PEER REVIEWED)

Singing Technique Analysis with Correspondence to Musical Score on Imitative Singing of Popular Music
Yuya Yamamoto, Tomoyasu Nakano, Masataka Goto, Hiroko Terasawa.
IPSJ Journal (major revision, submitted), in Japanese.

PrimaDNN': A Characteristics-aware DNN customization for singing technique detection.
Yuya Yamamoto, Juhan Nam, Hiroko Terasawa.
In Proc. of EUSIPCO 2023 (To Appear).

Human-in-the-loop Chord Progression Generator with Generative Adversarial Network.
Yoshiteru Matsumoto, Hiroyoshi Ito, Hiroko Terasawa, Yuya Yamamoto, Yuzuru Hiraga, Masaki Matsubara.
In Proc. of APSIPA ASC 2022.

Analysis and Detection of Singing Techniques in Repetoires of J-POP Solo Singers.
Yuya Yamamoto, Juhan Nam, Hiroko Terasawa.
In Proc. of ISMIR 2022 (Overall acceptance rate: 43%, Special call session acceptance rate: 34%).

Deforamble CNN and Imbalance-Aware Feature Learning for Singing Technique Classification.
Yuya Yamamoto, Juhan Nam, Hiroko Terasawa.
In Proc. of INTERSPEECH 2022 (Oral presentation, Acceptance rate: 50%).

Investigating Time-Frequency Representations for Audio Feature Extraction in Singing Technique Classification
Yuya Yamamoto, Juhan Nam, Hiroko Terasawa, Yuzuru Hiraga.
In Proc. of APSIPA ASC 2021.

AWARDS

IPSJ Yamashita SIG Research Award, *from IPSJ, 2023*
paper title: Analysis of frequency, acoustic characteristics, and occurrence location of singing techniques using imitated j-pop singing voice (at SIGMUS 132, 2021.)
Best presentation award (Best research), *from IPSJ SIGMUS, 2021*
Dean's award of University of Tsukuba, *2021*
Student award, *from IPSJ SIGMUS, 2019*

ACTIVITY

Reviewing
- IEEE/ACM Transactions on Audio, Speech, and Language Processing: 2023
Organizing
- ISMIR 2022 paper reading meetup: Jan 2023
Talk
- ISMIR 2022 report, at SIGMUS 136. 2023
- Lightning talk on Music Analysis Meetup (MUANA) 2021, 2022
- Guest lecturer for Junior high school student (career development) 2021
- Guest lecturer at University of Tsukuba (course: Music and Acoustic Information Processing) 2021