# SEUNGHEON DOH

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blog • google scholar • github

#### RESEARCH INTEREST

Music Informational Retrieval, Cross-Modal Retrieval, Multi-Modal Deep Learning

#### **PUBLICATIONS**

# Speech-to-Music Cross-Modal Retrieval Using Emotion Labels

Seungheon Doh, Minz Won, Keunwoo Choi, Juhan Nam

Proceedings of the IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2023 (submit)

#### Hi, KIA: A Speech Emotion Recognition Dataset for Wake-Up Words

Taesu Kim\*, **SeungHeon Doh**\*, Gyunpyo Lee, Hyung seok Jun, Juhan Nam, Hyeon-Jeong Suk (\*equally contribution) Proceedings of the 14th Asia Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA), 2022

# EMOPIA: A Multi-Modal Pop Piano Dataset

# For Emotion Recognition and Emotion-based Music Generation

Hung, Hsiao-Tzu and Ching, Joann and **Doh, Seungheon** and Kim, Nabin and Nam, Juhan and Yang, Yi-Hsuan Proceedings of the 22nd International Society for Music Information Retrieval Conference (ISMIR), 2021

# Music Playlist Title Generation: A Machine-Translation Approach

Seungheon Doh, Junwon Lee, Juhan Nam

2nd Workshop on Natural Language Processing for Music and Spoken Audio (NLP4MusA), 2021

# Million Song Search: Web Interface for Semantic Music Search Using Musical Word Embedding Seungheon Doh, Jongpil Lee, Juhan Nam

Late Breaking Demo in the 22st International Society for Music Information Retrieval Conference (ISMIR), 2021

# Musical Word Embedding: Bridging the Gap between Listening Contexts and Music

Seungheon Doh, Jongpil Lee, Tae Hong Park, and Juhan Nam

Machine Learning for Media Discovery Workshop, International Conference on Machine Learning (ICML), 2020

#### Träumer AI: Dreaming Music with Style GAN

Dasaem Jeong, Seungheon Doh, Taegyun Kwon

Workshop on Machine Learning for Creativity and Design, Neural Information Processing Systems (NeurIPS), 2020

#### **EDUCATION**

#### Korea Advanced Institute of Science and Technology (KAIST)

2021 - present

Ph.D Student in Graduate School of Culture Technology Music and Audio Computing Lab (Advisor: Juhan Nam)

#### Korea Advanced Institute of Science and Technology (KAIST)

2019 - 2021

MSc. in Graduate School of Culture Technology

Music and Audio Computing Lab (Advisor: Juhan Nam)

#### Ulsan National Institute of Science and Technology (UNIST)

2014 - 2019

B.S. in School of Business administration & Industrial Design

Academic Performance Scholarship Recipient for every semester

# EXPERIENCE

## Computational Intelligence, Learning, Vision, and Robotics (CILVR)

Jun 2022 - Aug 2022

New York University, United States

Visiting Student (Advisor: Kyunghyun Cho)

ByteDance Jul 2021 – Jan 2022

Remote (due to COVID-19)

Research Intern in Speech, Audio & Music Intelligence Team (Advisor: Keunwoo Choi, Minz Won)

#### Music and Audio Research Laboratory (MARL)

Dec 2019 - Feb 2020

New York University, United States

Visiting Student (Advisor: TaeHong Park)

# Advising & Teaching Activity

- Mentor, Junwon Lee Electronic Engineering, KAIST (Jun 2021 Sep 2022)
- Mentor, Hounsu Kim Mechanical Engineering, KAIST (Dec 2020 Mar 2021)
- Mentor, Nabin Kim CS/Music, Georgia Institute of Technology (Dec 2020 Mar 2021)
- TA, GCT634 Musical Applications of Machine Learning (Sep 2022)
- TA, GCT634 Musical Applications of Machine Learning (Sep 2021)
- TA, GCT731 Topics in Music Technology: Cognitive Science of Music (Sep-2020)
- TA, GCT576 Social Computing, KAIST GSCT (Sep 2019)

#### SERVICE & TALK

- Korean translator, NYU Deep Learning DS-GA 1008, Yann LeCun Alfredo Canziani (Sep 2020)
- Pycon Tutorial: Music and Deep Learning, PyconKR (Aug 2019)

#### Languages & Skill & Interests

- English(fluent), Korean(native)
- Python (Pytorch, Tensorflow), HTML/CSS, React.js, C++
- Media Art, Graphic Design, Prototyping & Making, Piano, Movie, Crossfit, Lifting