EUNJIN CHOI

Curriculum Vitae (Last update: September 19, 2025)
Ph.D Candidate @ Music and Audio Computing Lab, KAIST
jech@kaist.ac.kr \(\phi \) jech2.github.io +82-10-3674-4215

RESEARCH INTERESTS

Music Generation, Music Representation, Music Information Retrieval

My research focuses on enabling machines to learn and understand the compositional rules of human-created music. I develop models that capture musical structure and support controllable generation guided by human intention. Ultimately, I aim to empower creative musicking through technologies that foster human creativity and expression. The detailed tasks are as follows:

Generation: music generation with musical constraints

Representation: music representation learning

EDUCATION

Ph.D. Student in Culture Technology

Mar. 2022 - Present

Korea Advanced Institute of Science and Technology (KAIST), Daejeon, Korea

Advisor: Juhan Nam

M.S. in Culture Technology

Mar. 2020 – Feb. 2022

Korea Advanced Institute of Science and Technology (KAIST), Daejeon, Korea

Thesis: YM2413-MDB: A Collection of Multi-instrumental Symbolic Music and 1980s FM Music Generation for

Video Game

Advisor: Juhan Nam

B.E. in Convergence

Mar. 2015 – Feb. 2020

Daegu Gyeongbuk Institute of Science and Technology (DGIST), Daegu, Korea

Graduated magna cum laude

JOURNALS

Mel2Word: A Text-based Melody Representation for Symbolic Music Analysis

Saebyul Park, **Eunjin Choi**, Jeounghoon Kim, Juhan Nam

Music and Science, 2024

CONFERENCES

Cutting Kim: Playful Transgression Through VR Voice Interaction in Public Exhibition Contexts

Joonhyung Bae, **Eunjin Choi**, Juhan Nam

SIGGRAPH Asia 2024 Art Papers, ACM, 2025

Almoclips: A Benchmark for Evaluating Emotion Conveyance in Text-to-Music Generation

Gyehun Go, Satbyul Han, Ahyeon Choi, Eunjin Choi, Juhan Nam, Jeong Mi Park

Proceedings of the 3rd Workshop on Human-Centric Music Information Research, 2025

D3PIA: A Discrete Denoising Diffusion Model for Piano Accompaniment Generation

Eunjin Choi, Hounsu Kim, Hayeon Bang, Taegyun Kwon, Juhan Nam

2026 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP), 2026 (Submitted)

On the De-duplication of the Lakh MIDI Dataset

Eunjin Choi, Hyerin Kim, Jiwoo Ryu, Juhan Nam, Dasaem Jeong

Proceedings of the 25th International Society for Music Information Retrieval Conference (ISMIR), 2025

PianoBind: A Multi-modal Joint Embedding Model for Pop-piano Music

Hayeon Bang, Eunjin Choi, Seungheon Doh, Juhan Nam

Proceedings of the 26th International Society for Music Information Retrieval Conference (ISMIR), 2025

PIAST: A Multi-modal Piano Dataset with Audio, Symbolic and Text

Hayeon Bang, **Eunjin Choi**, Megan Finch, Seungheon Doh, Seolhee Lee, Gyeong-Hoon Lee, Juhan Nam Proceedings of the 3nd Workshop on NLP for Music and Spoken Audio (NLP4MuSA), 2024

Teaching Chorale Generation Model to Avoid Parallel Motions

Eunjin Choi, Hyerin Kim, Juhan Nam, Dasaem Jeong

Proceedings of the 16th International Symposium on Computer Music Multidisciplinary Research (CMMR), 2023

Bridging Audio and Symbolic Piano Data through a Web-Based Annotation Interface

Seolhee Lee, **Eunjin Choi**, Joonhyung Bae, Hyerin Kim, Eita Nakamura, Dasaem Jeong, Juhan Nam Late Breaking Demo in the 24th International Society for Music Information Retrieval Conference (ISMIR), 2023

YM2413-MDB: A Multi-Instrumental FM Video Game Music Dataset with Emotion Annotations

Eunjin Choi, Yoonjin Chung, Seolhee Lee, Jong Ik Jeon, Taegyun Kwon, Juhan Nam

Proceedings of the 23rd International Society for Music Information Retrieval Conference (ISMIR), 2022

Harmonionz, Rescue The Planet: A Voice Visualizing Game that Match Pitch with Color

Hajun Kim*, **Eunjin Choi***, Byeoli Choi* (*Equal Contribution)

2021 Annual Symposium on Computer-Human Interaction in Play, 2021

DOMESTIC CONFERENCES

Cutting Kim: VR Voice Interaction Game

Teaching Assistant, Daejeon Science High School R&E

Joonhyung Bae, **Eunjin Choi**, Juhan Nam

Proceedings of the HCI Korea 2023, 2023

RESEARCH EXPERIENCES	
Neutune, South Korea Research Intern, Symbolic Music Generation	Jun. 2021 – Sep. 2021
INFINYX, South Korea Research Intern in AI Development Team, Medical Image Segmentation (gallbladder)	Jul. 2019 – Aug. 2019
Visual Computing Lab, DGIST, South Korea Research Intern, Super-Resolution and Denoising	Jan. 2019 – Feb. 2019
Music and Audio Research Group, Seoul National University, South Korea Research Intern, Music Cognition Study and Musical Syntax Experiment	Jul. 2018 – Nov. 2018
Stem Cell Institute, University of Cambridge, United Kingdom Research Intern, Studying Lung Stem Cell Tumor Development	Jan. 2018 – Feb. 2018
UC Berkeley, United States Summer Session, Coursework: Introduction to Music Theory (Grade A)	Jun. 2016 – Aug. 2016
TEACHING EXPERIENCES	
Creating Games with Unity Main Instructor, KAIST SW Education Center	Apr. 2023 - Dec. 2023
Computational Analysis of Music Teaching Assistant, Daejeon Science High School R&E	Mar. 2022 - Dec. 2022
Investigation of Mozart Dice Music Generation System	Mar. 2021 - Dec. 2021

^{*}All authors contributed equally to this work.

Game Studies (GCT544)

Teaching Assistant, KAIST Graduate School of Culture Technology

EXHIBITIONS & WORKSHOPS

Exhibition, ACT Festival 2023: Future Legends, Asia Culture Center, Gwangju, Korea	Nov. 2023		
Workshop, 2022 Daejeon Art and Science Biennale: The Future City Associated Program - Game an City of Fantasy, Daejeon Museum of Art, Daejeon, Korea			
INVITED TALKS			
"Introduction to Music Information Retrieval", DGIST	Mar. 2023		
"Introduction to Music Transcription and Audio and Symbolic-level Music Analysis", DGIST			
"The Making Process of Harmonionz, Rescue the Planet", KAIST			
AWARDS AND HONORS			
Awardee, Producer DK AI Composition Challenge	2025		
3rd Place, KAIST Anthem Challenge	2025		
NC Scholarship, NCSoft	2022		
1st Prize, KAIST x NCSoft Game Design Course	2020		
Finalist, Unity Game Development Challenge (G-STAR 2018)	2018		
DGIST Undergraduate Research Award	2018		
1st Prize, Poster Session, DGIST Undergraduate Research Program	2017		
Hye-seul Leadership Award, DGIST	2017		
Academic Excellence Award, DGIST	2016		
SERVICES			
Opposition Committee Level Opposition Chain ICMID	2025		

Organizing Cou	mmittee. Local O	consigntion Chair	ISMID	2025
- Organizing Coi	mmutee. Locai Oi	ganization Chair	. IOMID.	ZUZ:)

Accountant, Korean Society for Music Perception and Cognition (KSMPC)

2022 - 2024

Exhibition Assistant, Game and Art: Auguries of Fantasy explores 'Fantasy Reality'

Jun. 2021 - Sep. 2021

Sep. 2020 - Dec. 2020

Reviewer, ICASSP, IEEE TASLP

LANGUAGES, SKILLS, AND INTERESTS

English (fluent), Korean (native)

Python(PyTorch), C, C++, C#, Matlab, HTML/CSS, JavaScript, Unity, VR (Oculus Quest 2)

Piano, violin, acoustic guitar, music composition

REFERENCES

References available upon request