Eunjin Choi

PhD Candidate
Korea Advanced Institute of Science and Technology
jech@kaist.ac.kr
jech2.github.io

RESEARCH INTERESTS

- Symbolic music representation
- Representation learning
- Symbolic music generation

EDUCATION

Mar. 2022 ~ Present	Korea Advanced Institute of Science and Technology Graduate School of Culture Technology	Daejeon, Korea
	Advisor: Juhan Nam	
	Ph.D. Student GPA: 3.84 / 4.3	
Mar. 2020 ~ Feb. 2022	Korea Advanced Institute of Science and Technology Graduate School of Culture Technology	Daejeon, Korea
	Thesis: YM2413-MDB : A Collection of Multi-instrumental Symbolic Music and 1980s FM Music Generation for Video Game <i>Advisor: Juhan Nam</i>	
	M.S. in Culture Technology GPA: 4.1 / 4.3	
Mar. 2015 ~ Feb. 2020	Daegu Gyeongbuk Institute of Science and Technology School of Undergraduate Studies	Daegu, Korea
	B.E. in Convergence GPA: 3.94 / 4.3	

PUBLICATIONS

 Saebyul Park, Eunjin Choi, Jeounghoon Kim and Juhan Nam, "Mel2Word: A Text-based Melody Representation for Symbolic Music Analysis", Music and Science, 2024

CONFERENCES

 Hayeon Bang, Eunjin Choi, Megan Finch, Seungheon Doh, Seolhee Lee, Gyeon-Hoon Lee, Juhan Nam, "PIAST: A Multimodal Piano Dataset with Audio, Symbolic and Text", the 3rd Workshop on NLP for Music and Audio (co-located with ISMIR 2024), San Francisco, United States (Nov. 2024) (to appear)

- 2. **Eunjin Choi**, Hyerin Kim, Juhan Nam, Dasaem Jeong, "Teaching Chorale Generation Model to Avoid Parallel Motions", the 16th International Symposium on Computer Music Multidisciplinary Research (CMMR), Tokyo, Japan (Nov. 2023)
- Seolhee Lee, Eunjin Choi, Joonhyung Bae, Hyerin Kim, Eita Nakamura, Dasaem Jeong, Juhan Nam, "Bridging Audio and Symbolic Piano Data through a Web-Based Annotation Interface", Late Breaking Demo in the 24th International Society for Music Information Retrieval Conference (ISMIR), Milan, Italy (Nov. 2023)
- Eunjin Choi, Yoonjin Chung, Seolhee Lee, Jong Ik Jeon, Taegyun Kwon, Juhan Nam, "YM2413-MDB: A Multi-Instrumental FM Video Game Music Dataset with Emotion Annotations",
 Proceedings of the 23nd International Society for Music Information Retrieval Conference (ISMIR), Bengaluru, India (Dec. 2022)
- 5. Hajun Kim*, **Eunjin Choi***, Byeoli Choi*, "Harmonionz, Rescue The Planet: A Voice Visualizing Game that Match Pitch with Color.", 2021 Annual Symposium on Computer-Human Interaction in Play, Virtual (Oct. 2021) *All authors contributed equally to this work.

CONFERENCES (DOMESTIC)

1. Joonhyung Bae, **Eunjin Choi**, Juhan Nam, "Cutting kim: VR voice interaction game", Proceedings of the HCI Koera 2023. The HCI Society of Korea, (Feb, 2023)

EXHIBITIONS

- ACT Festival 2023: Future Legends, Asia Culture Center, Gwangju, Korea
- 2022 Daejeon Art and Science Biennale : The Future City Associated Program Game and Art: Future City of Fantasy, Daejeon Museum of Art, Daejeon, Korea

RESEARCH EXPERIENCES

- Research Intern at Neutune, Korea (Jun. 2021 ~ Sep. 2021) / Symbolic Music Generation
- Research Intern at AI Development Team, INFINYX, Korea (Jul. 2019 ~ Aug. 2019) / Medical Image Segmentation, Company-University Cooperation Program
- Research Intern at Visual Computing Lab, DGIST, Korea (Jan. 2019 ~ Feb. 2019) / Super Resolution and Denoising
- Research Intern at Music and Audio Research Group(MARG), Seoul National University, Korea (Jul. 2018 ~ Nov. 2018) / Music Cognition Study and Musical Syntax Experiment
- Research Intern at Stem Cell Institute, University of Cambridge, United Kingdom (Jan. 2018 ~ Feb. 2018) / Investigate the Effect of Kras Expression on the Lung Stem Cell Tumor Development
- Undergraduate Research Program at DGIST, Korea (Mar. 2019 ~ Dec. 2019) / Develop the Stereotype Behavior Detector of Zoo Hyena using Tensorflow Object Detection API
- Undergraduate Research Program at DGIST, Korea (Mar. 2017 ~ Dec. 2017) / Investigate the effect of H2O2 on social behavior of Zebrafish
- Research Intern at Systems Biology Lab, DGIST, Korea (Jul. 2015 ~ Aug. 2015) / Proteomics Data Analysis of IPS Cell Injection Experiment

TA EXPERIENCES

Creating Games with Unity, KAIST SW Education Center, Daejeon, Korea / Main Instructor (Apr.

- 2023 ~ Dec. 2023)
- Computational Analysis of Music, Daejeon Science High School R&E, Korea / Teaching Assistant (Mar. 2022 ~ Present)
- Investigation of Mozart Dice Music Generation System, Daejeon Science High School R&E,
 Korea / Teaching Assistant (Mar. 2021 ~ Dec. 2021)
- Game and Art: Auguries of Fantasy explores 'Fantasy Reality', Daejeon Museum of Art, KAIST Graduate School of Culture Technology and NCSOFT, Korea / Exhibition Assistant (Jun. 2021 ~ Sep. 2021)
- Game Studies (GCT544), Professor Young Yim Doh, KAIST Graduate School of Culture Technology, Korea / Teaching Assistant (Sep. 2020 ~ Dec. 2020)

INVITED TALKS

- "Introduction to Music Transcription and Audio and Symbolic-level Music Analysis", Daegu Gyeongbuk Institute of Science and Technology (May, 2024)
- "Introduction to Music Information Retrieval", Daegu Gyeongbuk Institute of Science and Technology (Mar, 2023)
- "The Making Process of the Harmonionz, Rescue the Planet", Korea Advanced Institute of Science and Technology (Sep. 2021)

AWARDS AND HONORS

- NC Scholarship, NC Soft, Korea (May. 2022)
- 1st Prize, Game Development during Game Design Course(GCT742) in KAIST x NCSoft R&D Project, Korea (Dec. 2020)
- Advanced to Contest Finals and Invited G-STAR 2018 B2B Session, Unity Game Development Challenge 2018, Korea (Dec. 2018)
- DGIST Undergraduate Rearch Award, DGIST, Korea (Feb. 2018)
- 1st Prize in Poster Session and Final Report in Undergraduate Research Program, DGIST, Korea (Dec. 2017)
- Hye-seul Leadership Award, DGIST, Korea (Feb. 2017)
- Awarded as Academic Exellence in DGIST Freshman Global Leadership Program(Summer Semester at Univers, DGIST, Korea (Aug. 2016)
- Scholarship for Academic Excellence, DGIST, Korea (Apr. 2016)

SKILLS AND TECHNIQUES

• Programming: Python, C, C++, C#, Matlab

Deep Learning: Pytorch

• Game Development : Unity, VR(Oculus Quest 2)

• Web Application: HTML, Javascript, Django