

# JONGMIN JUNG

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[LinkedIn](#) | [Google Scholar](#) | [Website](#)

## RESEARCH INTEREST

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My research focuses on developing **Generative Music Intelligence**, structured around three interconnected research directions: inter-modal understanding, controllable generation, and disentangled music representation.

## EDUCATION

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**Master of Science in Artificial Intelligence** | Sogang University

Seoul, S. Korea | Sep 2023 — Aug 2025

**Music & Arts Learning (MALer) Lab** (Advisor: Dasaem Jeong)

*Thesis: U-MusT: Unified Cross-modal Translation of Score Images, Symbolic Music, and Performance Audio*

- Multi-task learning approach achieves a new state-of-the-art result in OMR(optical music recognition)
- The first successful end-to-end generation of audio directly from a score image
- A new dataset of over 1,300 hours of paired audio and score images

**Bachelor of Arts and Science in Art & Technology** | Sogang University

Seoul, S. Korea | Mar 2016 — Aug 2022

## PUBLICATIONS

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### **Local Multimodal Music Alignment from Global Supervision**

Irmak Bukey, Zachary Novack, [Jongmin Jung](#), Dasaem Jeong, Chris Donahue

[Paper](#) [Demo](#)

The 27th International Society of Music Information Retrieval Conference (ISMIR), 2026

### **U-MusT: Unified Cross-modal Translation of Score Images, Symbolic Music, and Performance Audio**

[Jongmin Jung](#), Dongmin Kim, Sihun Lee, Seola Cho, Hyungjoon Soh, Irmak Bukey, Chris Donahue, Dasaem Jeong

[Paper](#) [Demo](#)

IEEE Transactions on Audio, Speech and Language Processing (TASLP-Accepted / Master Thesis), 2025

### **From Generation to Attribution: Music AI Agent Architectures for the Post-Streaming Era**

Wonil Kim, Hyeongseok Wi, Seungsoon Park, Taejun Kim, Sangeun Keum, Keunhyoung Kim, Taewan Kim, [Jongmin Jung](#), Taehyoung Kim, Gaetan Guerrero, Mael Le Goff, Julie Po, Dongjoo Moon, Juhan Nam, Jongpil Lee

[Paper](#) [Demo](#)

Proceedings of NeurIPS 2025 Workshop on AI for Music, 2025

### **LAV: Audio-Driven Dynamic Visual Generation with Neural Compression and StyleGAN2**

[Jongmin Jung](#), Dasaem Jeong

[Paper](#) [Demo](#)

Proceedings of the 30th International Symposium on Electronic/Emerging Art (ISEA), 2025

### **MusicGen-Chord: Advancing Music Generation through Chord Progressions and Interactive Web-UI**

[Jongmin Jung](#), Andreas Jansson, Dasaem Jeong

[Paper](#) [Demo](#)

Proceedings of the Late-breaking/Demo of the International Society of Music Information Retrieval Conference (ISMIR), 2024

### **Nested Music Transformer: Sequentially Decoding Compound Tokens in Symbolic Music and Audio Generation**

Jiwoo Ryu, Hao-Wen Dong, [Jongmin Jung](#), Dasaem Jeong

[Paper](#)

Proceedings of the International Society of Music Information Retrieval Conference (ISMIR), 2024

## K-pop Lyric Translation: Dataset, Analysis, and Neural-Modelling

Haven Kim, [Jongmin Jung](#), Dasaem Jeong, Juhan Nam

Paper

Proceedings of the 2024 Joint International Conference on Computational Linguistics, Language Resources and Evaluation (LREC-Coling), 2024

## EXPERIENCE

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### AI Researcher / Technical Research Personnel | [RECON Labs](#)

Seoul, S. Korea | Full-time | Dec 2025 —

*Technical Research Personnel (Republic of Korea Armed Forces)*

### AI Researcher | [Neutune](#)

Seoul, S. Korea | Full-time | July 2025 —

*Research on controllable music stem generation and fair music attribution in the era of Generative AI.*

### LLM Engineer | [LET Lab](#), Seoul National University

Seoul, S. Korea | Remote | Sep 2024 — Dec 2024

*VLM-based assistant medication manager chatbot app for senior citizens.*

- Developed an agentic chat-bot assistant app for senior citizens, facilitating RAG with medication DB & OMR using the VLM features.

### Machine Learning Engineer | [Melodizr](#)

Seoul, S. Korea | Full-time | Jan 2025 — Apr 2025

*Humming-to-MIDI Transcription*

- Utilized 'SOME: Singing Oriented Melody Extractor' with rule-based autotune and neural/rule-based ensemble key detection algorithms.

### LLM Engineer | [LET Lab](#), Seoul National University

Seoul, S. Korea | Remote | Sep 2024 — Dec 2024

*VLM-based assistant chatbot app for blind people.*

- Developed a voice interaction based chat-bot assistant app for blind people, facilitating cameras on mobile devices to get the visual context as inputs.

### LLM Engineer | [Dept. of Art & Technology](#), Sogang University

Seoul, S. Korea | Remote | Jul 2024 — Jun 2025

*RAG-based MMCA artwork explaining chatbot.*

- Developed a chat-bot system explaining the artworks of Museum of Modern and Contemporary Art(MMCA), Korea.

### Machine Learning Researcher | [Replicate Inc.](#)

San Francisco, CA, USA | Remote | July 2023 — Jan 2024

*MusicGen-Chord' & 'MusicGen-Remixer*

- Developed *MusicGen-Chord*, enhancing MusicGen with chord progression control, enabling more nuanced AI-generated music conditioned on chord structures and textual prompts.
- Created *MusicGen-Remixer*, an application that remixes audio tracks based on user-provided prompts and chord features, ensuring seamless integration of user inputs with background music.
- Integrated both models into Replicate's web-UI using the *cog* package, allowing accessible, interactive music generation and remixing through a user-friendly cloud-based platform.

[MusicGen-Chord](#) [MusicGen-Remixer](#)

### AI Research Intern | [MARG Lab](#), Seoul National University

Seoul, S. Korea | Mar — July 2023

*Intelligent Music Production | KOCCA (Korea Creative Content Agency) | Prof. Kyogu Lee*

- Developed an integrated music production tool(including auto-composer, AI instrument selector, lyric generator and so on) using deep neural networks.

- Introducing Musika!(M.Pasini, ISMIR, 2022) in PyTorch and making its global style z-noise and temporal  $W$  noises disentangled each on temporal-wise and genre-wise when it comes to the generation process.

**AI Research Intern** | **MALer Lab**, Sogang University

Seoul, S. Korea | Jul — Dec 2022

*Virtual Space Sound Data Project* | NIA (National Information Society Agency) | Prof. Dasaem Jeong

- Devised sound event detecting algorithm using CNN on spectral domain.
- Managed and monitored how data labelers work alongside AI in human intelligence tasks as a Labeling Project Manager.

*Singing Voice Vocal Assessment Model* | Master's thesis of Myungseok Oh | Prof. Dasaem Jeong

- Devised classification algorithm using ChunkCNN with ResNET on spectral domain.
- Introduced a normalizing process of 4 different vocal samples to reduce the bias emerging from the characteristics of each vocalist's voice.

**Research Team** | **Ars Electronica**

Linz, Austria | Aug 2022

*Welcome to Planet B* | Festival University 2022

- Used natural language processing techniques to analyze the data from the survey conducted on 200 people from 72 countries about climate change on multicultural, intercultural, local and global perspectives.
- Utilized Word2Vec with the data from the survey in text format and then fine-tuned the model with partial datasets separated according to the demographics of the survey participants.
- Visualized the relationships between keywords with the demographic insights, using UMAP.

## LANGUAGES & SKILL & INTERESTS

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- English (fluent), Korean (native)
  - TEPS 475 (2023)
  - TOEFL 100 (2019)
  - TOEIC 970 (2018)
- Python (PyTorch)
- Media Art, Sonic Art

## SERVICE

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**Organizing Committee, Social Media Chair** | ISMIR 2025

Daejeon, S. Korea | Sep 2025

**Reviewer** | ISMIR 2026, NeurIPS 2026, ICLR 2026, ICML 2025