
NeurIPS 2023 1st Workshop on AI Music Generation with AI Music Competition

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Main Proposal

Introduction Music can touch the hearts of any audience without them possessing any knowledge of its context. The power of music is transcendental, and it stems from the timbre of the instrument(s), the fundamental rhythmic structure and melody, the dynamics, instrumentation, and many more, all of which cooperate in some form of harmony to create the final product. With the recent rise of Artificial Intelligence-Generated Contents (AIGC), Artificial Intelligence (AI) for music is a promising field full of creativity, novel methodologies, and technologies that are yet to be explored. Currently, AI for music methods have been commonly concentrated on utilizing machine learning and deep learning techniques to generate new music. Despite the significant milestones that have been achieved thus far, many are not necessarily robust for a wide range of applications.

AI music itself is a timely topic. This workshop aims to generate momentum around this topic of growing interest, and to encourage interdisciplinary interaction and collaboration between music theory and applications, AI, machine learning, Natural Language Processing (NLP), computational neuroscience, Human-Computer Interaction (HCI), and audio processing. It serves as a forum to bring together active researchers and practitioners from academia and industry to share their recent advances in this promising area.

We propose to incorporate an AI-based musical and lyrical composition competition into this workshop to stimulate both scientific and artistic creativity as well as provide such a unique platform. All musicians, lyricists, and hobbyists are welcome to submit their compositions, and musical genres of all kinds are welcomed as well. The compositions may be comprised of original or human-enhanced AI-generated scores/lyrics.

This is an open call for papers, which includes original contributions considering recent findings in theory, applications, and methodologies in the field of AI music generation. The list of topics includes, but not limited to:

- Machine learning/AI for music
- Natural language processing for music generation
- Algorithmic music generation
- Music generation based on a specific aspect:
 - Lyrical, chordal, motivic, melodic, and rhythmic
- AI generated lyrics
- AI generated instrumental audio (including vocal)
- Computational musicology
- AI music interpretation
- AI music data representation
- Music evaluation metrics
- Multiple-channel AI music generation
- Music chatbots

- AI musical fusion (notes, audio, etc.)
- AI generation for musical performance and expression
- AI music enhancement (e.g. AI-generated instrumentation)
- AI musical ethics
- AI music generation datasets
- Human-Centered Interaction (HCI) for AI music generation
- AI music for neuroscientific applications
- AI-aided music theory applications

Attendance TBD

Tentative List of Invited Speakers TBD

Diversity Statement TBD

Earlier Versions N/A

Technical Needs TBD

Important Dates

- Sept. 22, 2023: Submission of full and short papers
- Sept. 29, 2023: Submission of posters & musical compositions
- Oct. 27, 2023: Notification of paper acceptance
- Nov 24, 2023: Camera-ready of accepted papers
- Dec 15-16, 2023: Post-Conference Workshop on AI Music Generation

Organizers

Organization Team Callie Liao, Chair

TBD

Program Committee TBD

References