

Potsdam AI VS. STUDENT COMPOSERS:

STATE UNIVERSITY OF NEW YORK

The Power and Effects of AI Compositions

ABSTRACT

This study investigates the impact of artificial intelligence on musical composition, focusing on prompts selected by a Composition Professor. Students will compose musical examples based on these prompts, which will then be processed using Suno.AI—a generative engine that can create full songs, including lyrics, from user input. With permission from participating composition majors, we will explore their personal experiences with AI tools, discussing how these technologies have influenced their creative process and whether they view AI as a helpful tool or a potential threat. Ultimately, this study aims to assess AI's current role in music composition and its potential to shape the future of music creation.

BACKGROUND

Music Composition is focused on the fundamentals of combining music theory and the human ear to create a musical work that's pleasing, interesting, or controversial. Humans have created music for as long as time and have only gotten better. Can AI compare? Suno.AI was released on December 20th 2023. Suno.AI is an artificial intelligence program which is designed to create original musical compositions. This can be done with both vocal and instrumentals. Suno.AI describe themselves as a company that break barriers between you and the song you dream of making. No instrument needed, just imagination. From your mind to music.

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SO WHAT'S NEXT?

Artificial Intelligence has already posed to be a threat to the future of composition, however has also displayed various tools that are used for drawing inspiration. With the development of technology, there are more innovative ways to simplify the process of composition; nonetheless, no AI can exhibit the humane process to consider theory and emotional impact into the creation of musical works. As a result, we believe that AI will co-exist alongside composers as both a tool and a threat.

THE METHOD

For our project, we contacted 4 composition students here at the Crane School of Music. We gave them a prompt of "Create an original song of 30 seconds to one minute. We had it be vague so that they can share their own unique compositional voice. We then gave the same exact prompt to Suno.AI. From there we compared the songs based on originality, musicality, and structure.

RESULTS

Multiple composition students sent us their original works, and there was an immediate distinction between what Suno.AI is capable of, and what humans are capable of. Off the bat, the composition students not only provided an audio file of their work, but sheet music. Suno, and any other artificial intelligence softwares are not advanced enough to do this. Suno.AI generated multiple songs for us which came with an album cover as well. Immediately, the AI defaults to a vocal song and does not provide an instrumental composition. The AI also generated songs which all had the exact same structure of verse, chorus, verse, bridge and chorus. We also found that when you put in instrumental/a specific instrument, it defaults to one specific genre such as jazz and doesn't elaborate. It also has difficulty making a instrumental solo (ex: Clarinet solo) in The composition students provided vastly unique compositions. They were all different in their own ways, never following the same exact structure or music theory. Each were individual.

CONCLUSION

Through our analysis of both the student compositions as well as the AI pieces, we found that while Suno.AI has music generation capabilities, it lacks compared to human composers in regards to complexity in song structure and variation of genres. The student composers far surpassed that of the Suno AI pieces.