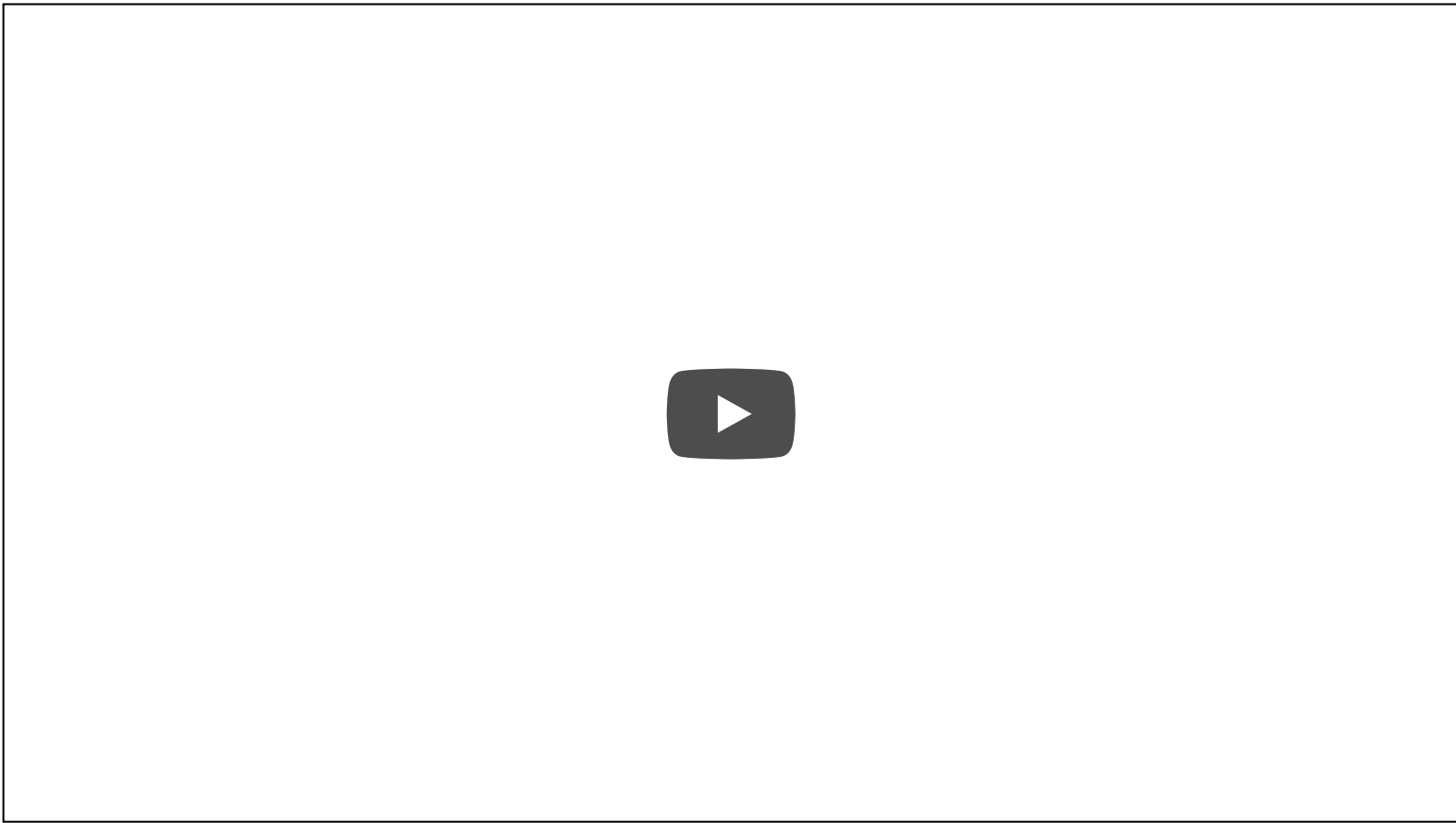




AWS Composer and Generative AI



AWS Deep Composer uses Generative AI, or specifically Generative Adversarial Networks (GANs), to generate music. GANs pit 2 networks, a generator and a discriminator, against each other to generate new content.

The best way we've found to explain this is to use the metaphor of an orchestra and conductor. In this context, the generator is like the orchestra and the discriminator is like the conductor. The orchestra plays and generates the music. The conductor judges the music created by the orchestra and coaches the orchestra to improve for future iterations. So an orchestra, trains, practices, and tries to generate music, and then the conductor coaches them to produced more polished music.



GANs is Similar to an Orchestra and a Conductor: The More They Work Together, the Better They Can Perform!

AWS DeepComposer Workflow

- 1. Use the AWS DeepComposer keyboard or play the virtual keyboard in the AWS DeepComposer console to input a melody.
- 2. Use a model in the AWS DeepComposer console to generate an original musical composition. You can choose from jazz, rock, pop, symphony or Jonathan Coulton pre-trained models or you can also build your own custom genre model in Amazon SageMaker.
- 3. Publish your tracks to SoundCloud or export MIDI files to your favorite Digital Audio Workstation (like Garage Band) and get even more creative.

QUESTION 1 OF 2

Which of these are available as pre-trained genres in AWS DeepComposer?

☒ Jazz

☒ Pop

☐ Country Western

☒ Rock

☐ Blues

☒ Symphony

SUBMIT

QUESTION 2 OF 2

Which model is responsible for each of these roles in Generative AI?

Generator

ROLE	MODEL
Evaluates the quality of output	Discriminator
Creating new output	Generator
Providing feedback	Discriminator

SUBMIT