Keynote Talk - 1

Jukebox and MuseNet - Generating Raw Audio and MIDI Music

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Abstract

Music generation is exciting both as a tool for augmenting human creativity, and as a domain for pushing the current capabilities of generative neural net models. OpenAI's MuseNet is a MIDI-based model able to generate music imitating hundreds of composers and styles. Composers such as Philip Glass have experimented with the model, and it has been used as a co-composing tool for works performed by the BBC Philharmonic, among others. Jukebox is a model that generates music with singing in the raw audio domain. Provided with written lyrics and an artist and genre to imitate, the model generates complete songs. This talk discusses both MuseNet and Jukebox in more depth, as well as some recent artistic collaborations.

Biography

Christine McLeavey is a research scientist at OpenAI where she created MuseNet and collaborated to create Jukebox. Groups such as the BBC Philharmonic and SF Symphony have performed pieces co-composed using MuseNet. Also a Juilliard-trained pianist and avid chamber musician, she is particularly interested in Human/AI musical collaborations. She holds a masters in neuroscience from Stanford, and a degree in physics from Princeton.