Valerio Velardo - The Sound of AI 1 mese fa

Time to plan the next technical series 🚀🚀 What series would you like to see next? If you have other ideas or would like to share your thoughts, please leave a comment. Thanks!

170 voti

Hands-on introduction to Essentia 8%

Sound generation with Variational Autoencoders 32%

Audio data augmentation 19%

Audio processing (STFT) on GPU with TensorFlow 24%

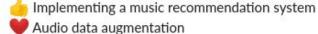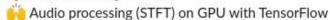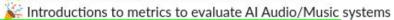Introductions to metrics to evaluate AI Audio/Music systems 16%

👍 18 👎 ↪ 💬 17

valerio 10:15 AM

@channel Time to plan the next series on The Sound of AI channel 🚀 🚀 What series would you like to see next? (Please use the emojis to vote)

🙂 Hands-on introduction to Essentia
👍 Implementing a music recommendation system
❤️ Audio data augmentation
🙌 Audio processing (STFT) on GPU with TensorFlow
🎉 Introductions to metrics to evaluate AI Audio/Music systems
💯 Sound generation with Variational Autoencoders

If you have other ideas or would like to share your thoughts, please leave a comment. Thanks! (edited)

💯 28   🎉 8   👍 11   🙌 15   🙂 8   ❤️ 13   😀⁺

Generating sound with neural networks

Valerio Velardo

What you'll learn

- Generate sound with Variational Autoencoder (VAE)

- VAE theory

- Implement and train VAE with Keras

- Perform Short-Time Fourier Transform / Inverse Short-Time Fourier Transform with *liborsa*

- Preprocess audio dataset

What should you expect?

- Intuition

- Theory

- Coding tutorials

Prerequisites

- Intermediate Python

- Basic understanding of Deep Learning

- Familiar with TensorFlow/Keras [advisable but not necessary!]

- Familiar with Short-Time Fourier Transform [advisable but not necessary!]

Where do you I get code/slides?

Technology stack

Sound datasets

- N-synth

- MAESTRO

Who's this series for?

- ML/DL engineers

- Computer science students

- Software engineers

- Music technologists

Join the community!

thesoundofai.slack.com

What next?

- Defining the sound generation task

- Approaches to generate sound with DL

- Challenges of DL sound generation