

Part 3: GM tools for musicians

- RAVE
- Compose & Embellish
- Mustango

20. RAVE: Realtime Audio Variational autoEncoder

Generative Music AI

THE **SOUND** OF AI



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Group

Dr. Iran Roman

 Iran Roman

- Postdoctoral scholar at New York University's Music and Audio Research Laboratory
- I maintain **musicinformationretrieval.com** (visit us!)

github.com/iranroman/musicinformationretrieval

- CCRMA Ph.D. graduate (2021)

ccrma-mir.github.io

Interests:

- Theoretical Neuroscience
- MIR
- Spatial Audio
- Multi-modal AI

Iran

iranroman.github.io

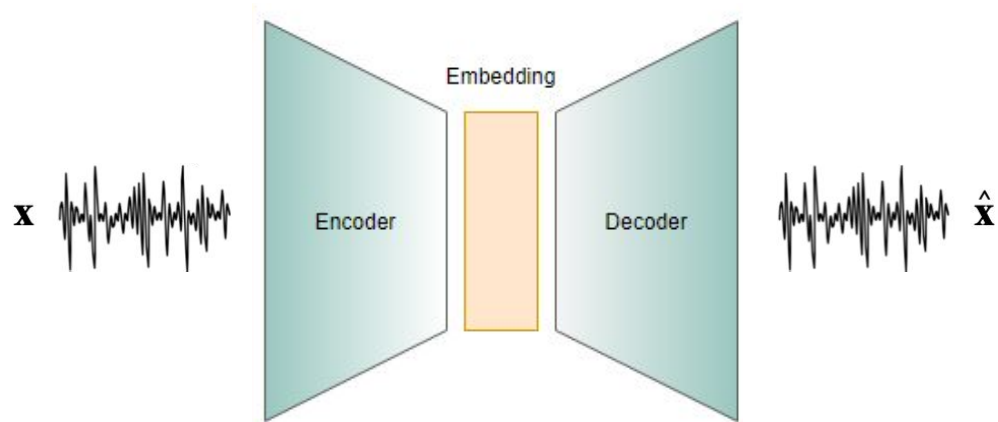
RAVE: A variational autoencoder for fast and high-quality neural audio synthesis

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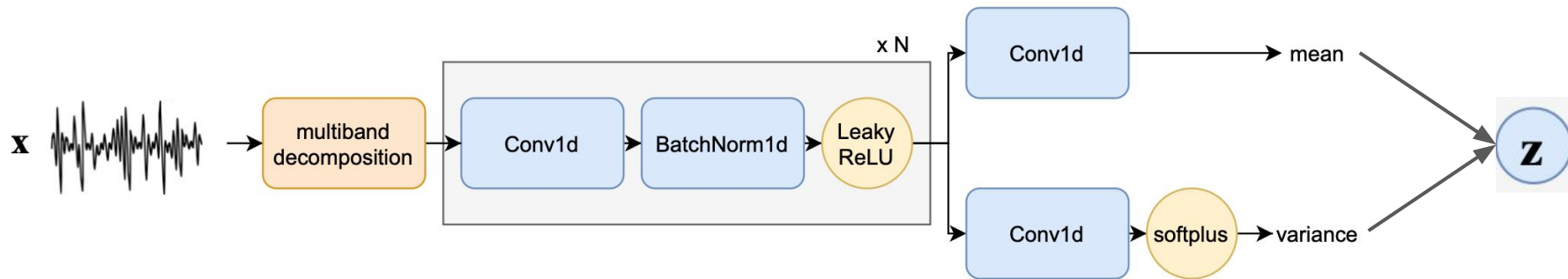
What will we cover?

- RAVE model architecture
- Usage to generate audio

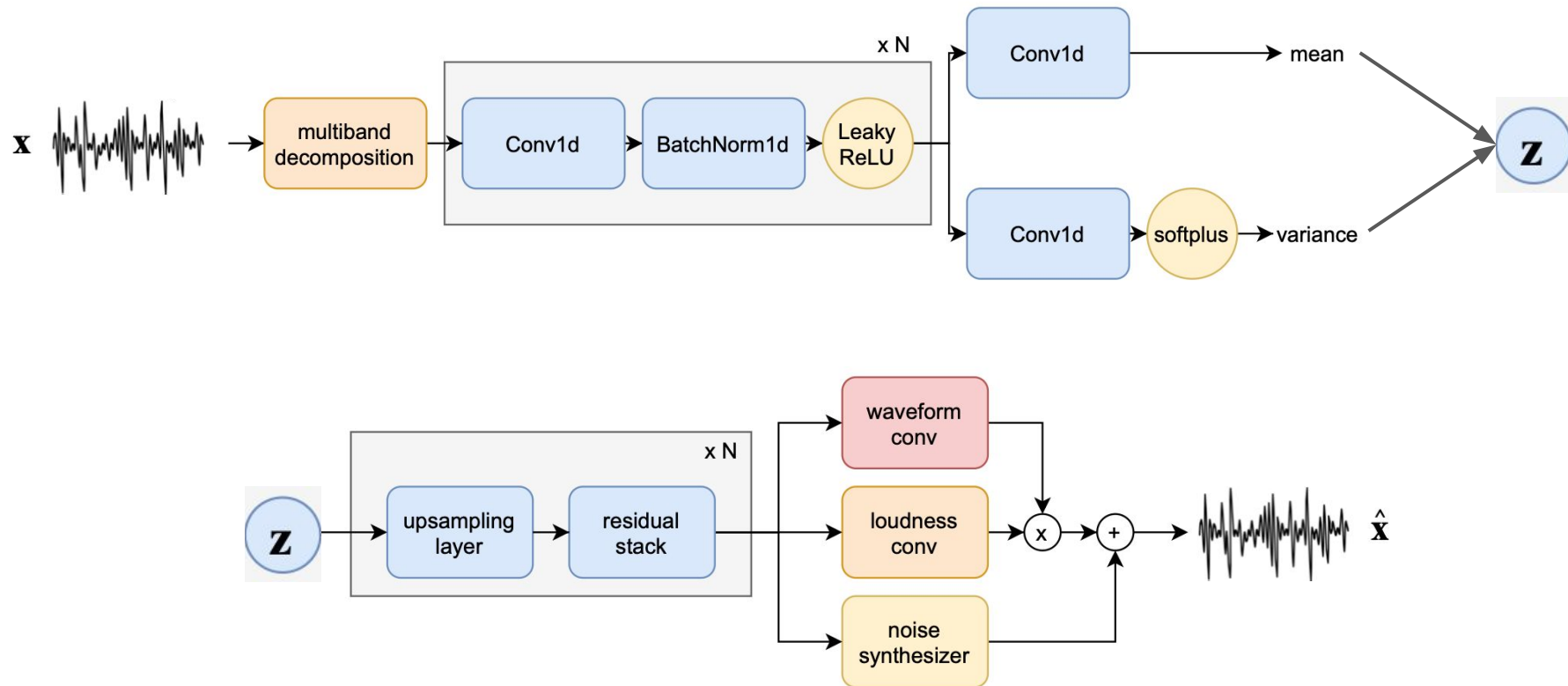
RAVE



RAVE



RAVE



But why?

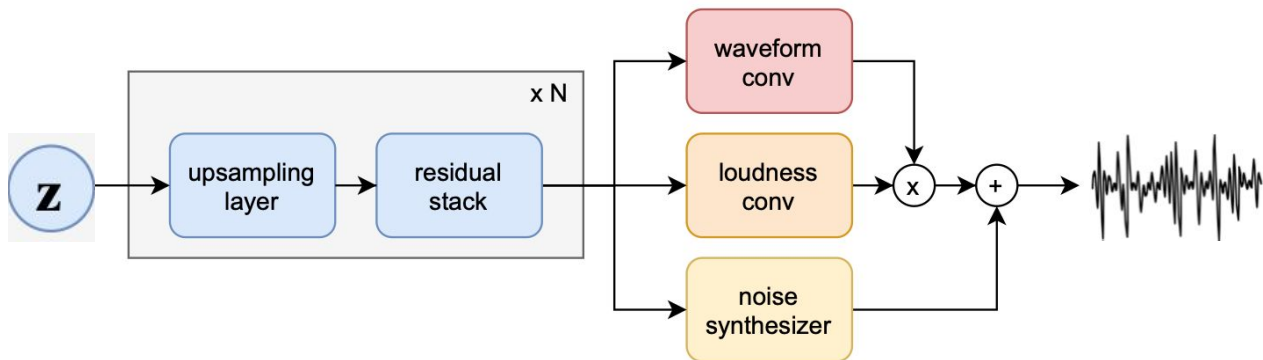
VAEs not only allow you to “encode” and “decode” signals.

Emergent property after training: **Generation**

But why? **Generation!**

VAEs not only allow you to “encode” and “decode” signals.

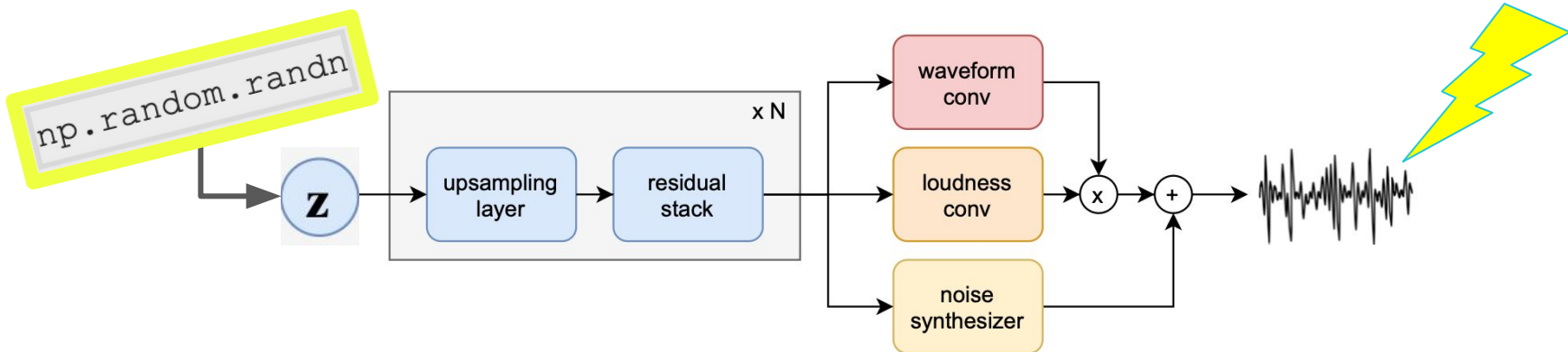
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Emergent property after training: **Generation**



Demo time!

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