

SOUND BY AI

AI-DRIVEN SOUND IN
EDUCATION

BEFORE WE START

01 A Youtube channel I watch called Bruce & Stephanie's Comics always starts with a disclaimer: "For information purposes only, do your own research..."

02 This presentation focuses on my investigation of generating sound with AI - My notebook. I'm particularly interested in what I refer to as the 'pop tools,' or the popular culture tools that are being examined today...

03 It's important to create and explore using your own personal content, your own intellectual property (IP), and to feel fully comfortable contributing to the collective AI consciousness. In many cases, to gain full ownership of the AI content you create, you may need to subscribe and obtain licenses/copyrights for the work you generate, especially for commercial use.

04 Please note it's important that you understand the AI policies and copyright issues that your institution is governed by.

BEFORE WE START

- 05 AI is useful as an idea generation tool and placeholder before creating your own original sound designs...



SOUND ON

“Sounds may gain and focus learner attention, reduce distracting stimuli, and make learning more engaging. In addition, they may help learners condense, elaborate on, and organize details, highlighting interconnections among new pieces of information and making connections to preexisting knowledge.”

- M.J. Bishop

START HERE



What are AI sound design tools?
How does an AI sound design tool
generate sound?

AI sound design tools are software applications or platforms that utilize artificial intelligence techniques to assist in the creation, manipulation, or analysis of sound.

TOOLS



Text 2 Speech like TTS Maker and ElevenLabs

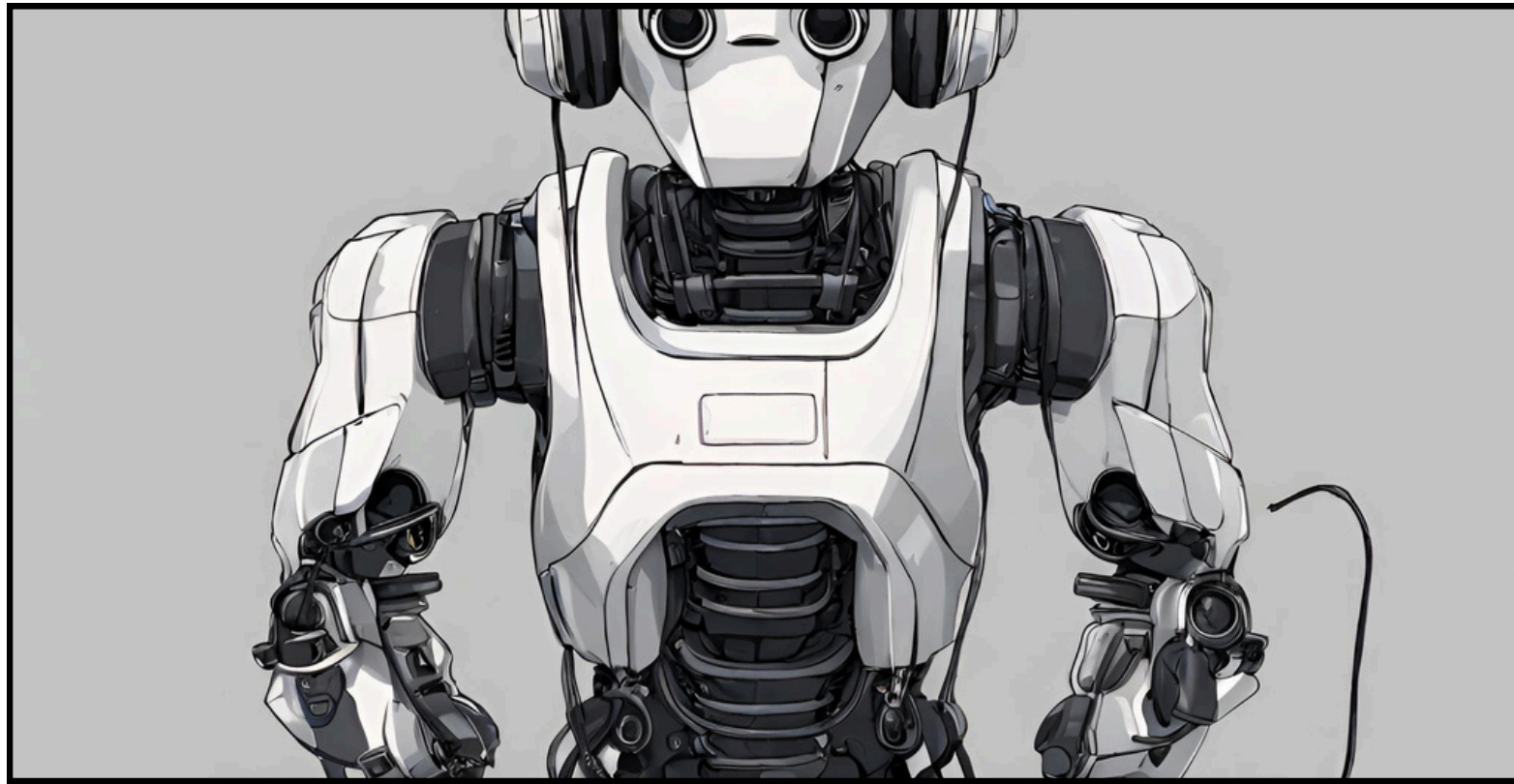
Music generation like Soundful

SFX creation like Audiobox

Synth patches like Synplant 2

Tools that do sample generation and manipulation, Auto mixing and mastering, SFX generation, Voice synthesis and manipulation.

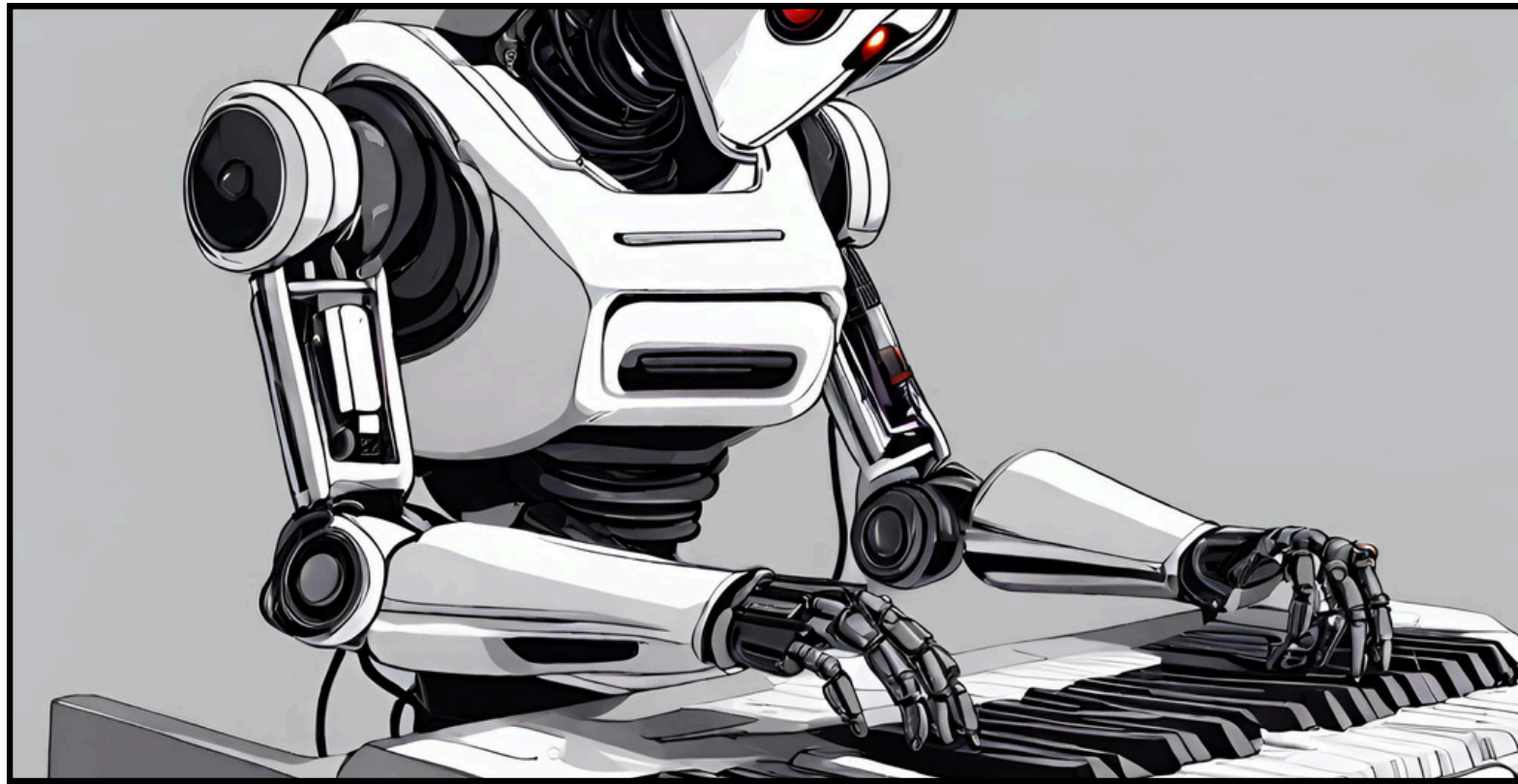
SYNTHESIS



Many AI sound design tools use synthesis algorithms to create sound from scratch. There are different types of synthesis methods, including: **Additive**, **Subtractive**, and **Granular**...

Many AI sound design tools combine multiple synthesis techniques and machine learning approaches to generate a wide range of sounds with varying degrees of realism and complexity.

SONIC PEDAGOGY

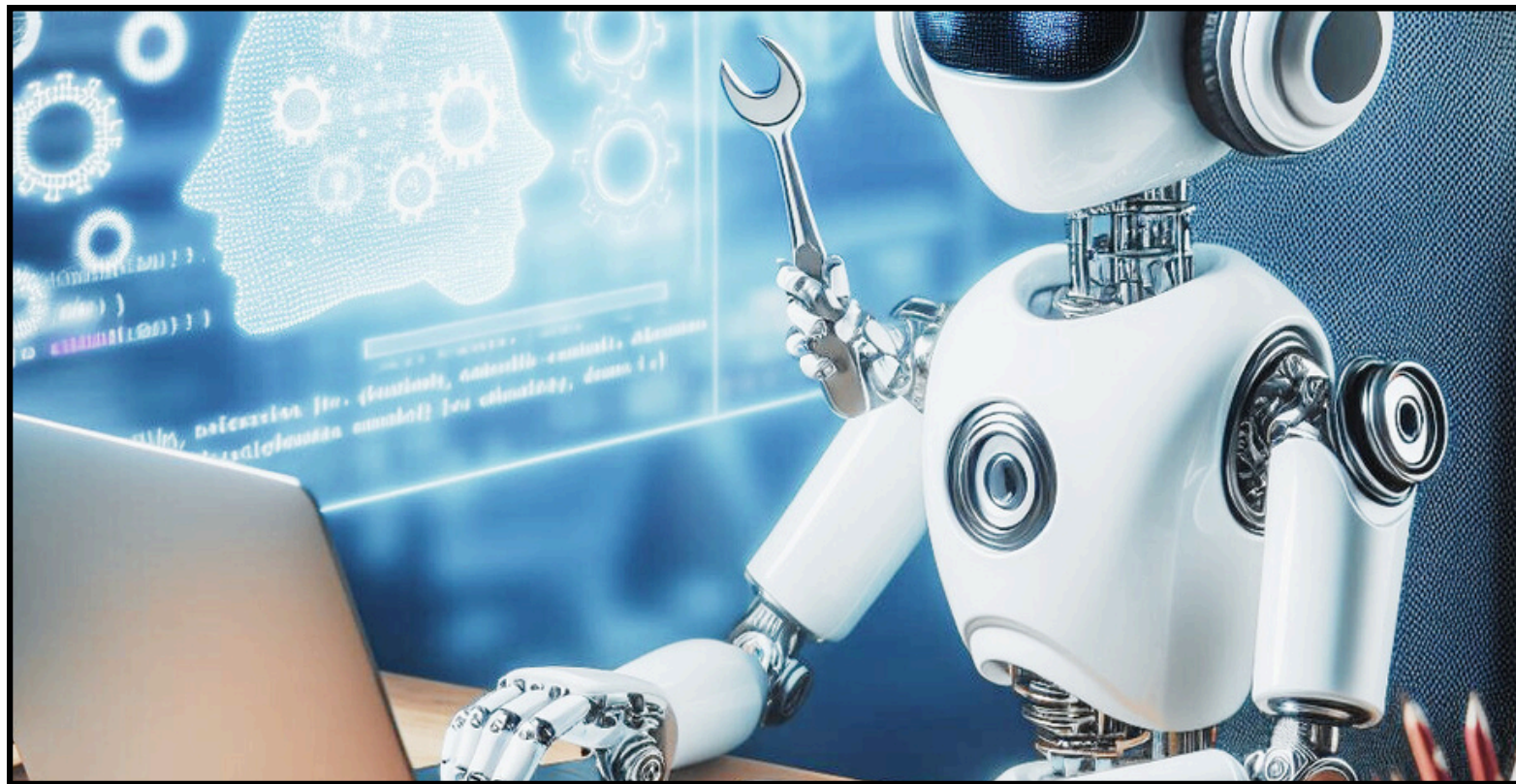


AI for Sound design in a teaching and learning context...

What are sonic pedagogy principles?
Can it make learning more accessible?

Sonic pedagogy goes beyond traditional approaches to education by integrating sound-based activities, experiences, and technologies into the teaching and learning process

SONIC PEDAGOGY



By incorporating sound-based activities into teaching and learning practices, educators can enhance engagement, creativity, and critical thinking skills among learners.

Sound shapes and is shaped by pedagogical practice. Sound permeates and resounds in pedagogical contexts and interactions in ways that are cultural, material, and relational. - Chris McRae

IN PRACTICE

Creative ways to add AI-generated sound to lessons and course plans.



SOUND ACTIVITIES



Language learning

Collaborative music projects

Sound analysis

Sound storytelling

Reflective response

Creative writing prompts to generate sound

Sound activities in the classroom provide valuable opportunities for students to engage with the auditory dimension of learning, fostering sensory awareness, cognitive development, and creative expression.



SOUND PROMPTS

“Time Travel Adventure: Write a story about a character who travels through time to different historical periods or future epochs. Describe the sounds they encounter in each time period, from the clatter of horse-drawn carriages in Victorian London to the hum of futuristic technology in a distant space colony. Have students use AI to generate sounds that evoke the distinct time periods visited by the character...”



THANK YOU

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