



Audio Research @ Adobe

Audio AI for Human-Centered Creativity



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We invent audio AI technology for human-centered creativity. Our goal is to empower people to bring their creative ideas to life through high quality audio content. This ranges from music and podcasts to video and immersive experiences, as well as emerging media types. We are dramatically simplifying the creation process with AI so that people can quickly go from idea to produced content regardless of skill level, iterating on the creative aspects rather than the technical ones.



Audio Research @ Audio AI for Human-Centered Creativity

We do this through our research on retrieval, processing, and generation of speech, music, and everyday sounds with a focus on representation learning and generative modeling. This is often at the intersection of audio with video and natural language processing. We also work on new human computer interaction paradigms as the interface between human creativity and powerful AI.



Audio Research Internships

Adobe Research is offering audio research internships in 2023. We are looking for PhD students who are excited about pushing the state of the art in the field and having a real-world impact. Our internships are typically in the summer, but we will consider off-summer interns as well. The call for internships is out, check out the Music-IR mailing list!

During the internship, you will directly collaborate with one or more of our audio researchers. Our internships typically result in top-tier papers, patents, and/or features in Adobe's creative products. We often foster ongoing collaborations and are open to projects that last beyond the internship and potentially become part of your PhD thesis.

APPLY HERE



Showcase

Enhance Speech

A one button technology to automatically transform a typical home voice recording (reverb, noise, low quality mic) into professional studio-quality audio.

Try it out: <https://podcast.adobe.com/enhance>



Enhance Music

A system that makes use of GANs plus Diffusion Models to enhance and clean up music recordings.

Video and link to the paper:

<https://twitter.com/urinieto/status/1520179544132448256?s=20&t=1lllklzChgrcqy79vE8Puw>

Demos and more info: <https://nkandpa2.github.io/music-enhancement/>



Mic Check

An AI-based onboarding assistant to guide users to a good microphone recording setup.

Try it out: <https://podcast.adobe.com/miccheck>



Sound Seek

Content creators are constantly looking for specific sounds that occur multiple times in audio recordings. Wouldn't it be great if you could simply select a couple of target sound examples, and have a machine find the rest? Boom.

Video: [#ProjectSoundSeek: Adobe MAX 2019 \(Sneak Peek\) | Adobe Creative Cloud](#)



Music For Video

Music is an integral part of video. Matching music to video can be hard, especially for non-professionals. We have trained an AI model that takes a video as input and returns a selection of best-matching music tracks out of a music collection.

Video, paper, and more:

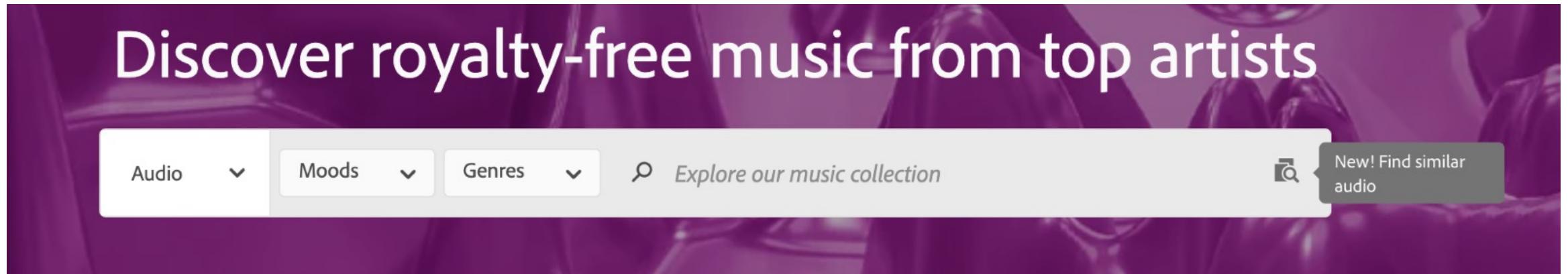
https://twitter.com/justin_salamon/status/1539616371503497218?s=20&t=mgPTZDwUsQLE_x1rj0g54Q



Find Similar Music

Recommend similar music by example. Our goal is to make the processing of finding music easier and more powerful for audio/video content creators.

Try it out on Adobe Stock: <https://stock.adobe.com/audio>





Team & More!

Meet our researchers and learn more about our work:

<https://research.adobe.com/research/audio/>



