Cole Bianchi, Dante Dodds, Kevin Dong, Nathan Litzinger, Andre Mitrik, Efe Sahin

Link: https://twitter.com/KevinDo63902043/status/1652037241856729124

Kevin Dong @KevinDo63902043 · 7m

The transcription model then takes the PCM data and converts that to a float16 NumPy array and padded to 30 seconds. Using OpenAI's Whisper Tiny-en model, it then transcribes and saves the transcribed words along with the corresponding timestamps.

1 12

Kevin Dong @KevinDo63902043 · 6m

This output is added to the shared queue of existing words and timestamps. The filter takes the transcription output as a shared queue and if a word is found in the queue that is on the "banned" word list, the time stamp is added to the banned time list for the playback.

1 13

Kevin Dong @KevinDo63902043 · 4m

For the final playback, a bleep is then put in place of the banned word, and the output is a cleaned version of the input audio file. This whole process is super-fast and accurate with only 5 seconds of inference time.

1 9

Kevin Dong @KevinDo63902043 · 5m

Throughout the process, the whole team learned a lot about AI and the usefulness of this technology as well as how easy it was to implement the whole project as well as think about how easy it was to run the system on a laptop.

1 6

Kevin Dong @KevinDo63902043 · 4m

This begs the question: If we can do it, what about other people who want to but not for academic reasons? What if people use this to censor other people? What if the government uses this technology to censor specific groups from speaking out against it?

1 5

Kevin Dong @KevinDo63902043 · 4m

This reminds me of that Black Mirror episode where the MC could filter out images, but instead of images, a person could mute specific sounds and people. Or in reverse, an organization could cause people to filter out negative propaganda.

1 4

Kevin Dong @KevinDo63902043 · 4m

On the other hand, imagine in the future you can filter out specific sounds or people or be able to control multiple sounds at once. It's like having a more powerful sound equalizer at your fingertips.

1 3

Kevin Dong @KevinDo63902043 · 4m

Imagine having music in the background while you're at a lecture, simply just press a button. That annoying family member, muted. Similarly, parents can use this for their children for more mature music and videos.

1 3

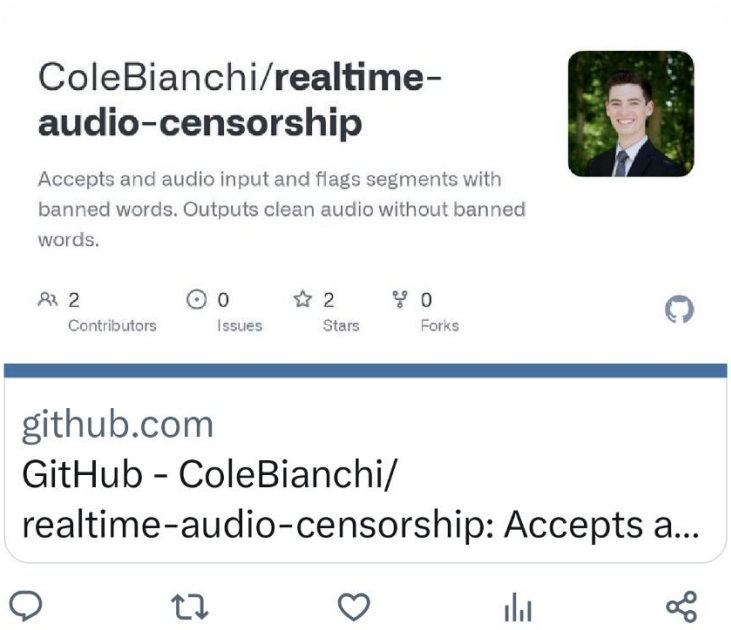
Kevin Dong @KevinDo63902043 · 3m

All in all, we had a great time working on with a project and we all got to mess around with various models for transcription and filtering. It was super cool to see how everything worked individually and together. We also had tons of fun testing various songs and videos clips.

1 1

Kevin Dong @KevinDo63902043 · 3m

If you have any questions about our project or are just interested in how we did it, the GitHub link is attached with all our personal information. LINK:



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