## Why it is nothing but a parody

We have the utmost respect for copyright as well as everybody's right to one's voice. That's why we have thoroughly studied the issue of the use of our technology in various products. We found that the parody is one of the ways to use it. A parody (derived from Ancient Greek  $\pi\alpha\rho\dot{\alpha}$  "near, besides, parallel to" and Ancient Greek  $\dot{\phi}\delta\dot{\eta}$  "song, ode") is an artwork which is created to imitate and/or make fun of an original work employing deliberate reproduction of unique features of a known work in a modified form.

This means that a person who parodies another person has his or her voice and uses his or her skills and talents. Thanks to many hours of training, a parodist changes his or her voice into a different one and emphasizes its special features by deliberately exaggerating or magnifying.

When developing our synthesized voices, we used the approach which a parodist uses when creating a parody, as follows:

- Our neural network was originally taught using a huge amount of data (over 30 hours of recorded speech) of a single announcer who isn't a well-known person. After that, our neural network was given additional training with the use of the data of a certain celebrity (under 1 hours of speech). That means that our goal was just to teach the model to create parodies but we didn't teach it using raw data of a certain celebrity (which isn't hard indeed). Thus, like a parodist, our neural network has a certain "own voice", which it tries to change and make it as close to that of a certain celebrity as possible.
- We deliberately picked the data from the selections of announcers' speeches which could add as many comic elements to the voice as possible. For example, when creating a voice resembling that of Donald Trump, we deliberately picked the data where he speaks in a raised voice, that's why with the synthesis complete, he often shouts even ordinary words, which makes the most listeners laugh. We ran focus groups, and over 60% noted that hearing these fragments made a person smile.
- We modified the voice and added some unnatural effects. When
  preprocessing the data before teaching the neural network, we deliberately
  applied various filters, for example, we raised the tone and added artificial
  metallic and robot-like sounds to create a voice resembling that of Donald
  Trump to make the loudly shouted vowels sound more forced and comic.

The technical aspects of the creation of parody voices, which we have listed above, describe only a part of the process. In addition to these, we introduced many other

changes to the voices. It's a rather difficult task to create a parody voice, which requires a creative approach and many hours of experiments.

Besides technical changes to the voices, we have also worked on the content component. Our app offers only humorous stories that are somehow related to a certain comic trait of a certain announcer. For example, for Joe Biden's voice, we wrote the jokes about his friendship with Barack Obama.

Users can't create any text of their own except the case of customized jokes where they can only have their name and surname voiced. These jokes are meant to be humorous in nature and subject to mandatory moderation. The watermark is attached to every video template.

As to the voices of the characters to which we provide unrestricted access, all of them were reconstructed using the data of actual parodists / voice actors whom we hired to make recordings of them reading certain texts to teach the neural network and to whom we paid. It's rather easy to find such parodists / voice actors using platforms like <a href="https://www.fiverr.com/">https://www.fiverr.com/</a>. We also provide access to the voices of cartoon characters only. When it comes to real people's voices, we provide access to the templates only.

In addition to the above-presented arguments, we realize that this sphere lacks comprehensive government regulation, that is why we don't open the access to the technology and don't provide our users with the opportunity to synthesize any text using any voice. Moreover, we're open to dialogue on this issue and we're ready to hear every suggestion and comment and modify our product, if necessary. If you have any questions, please, write at hello@parodist.ai. We'll be happy to discuss this.