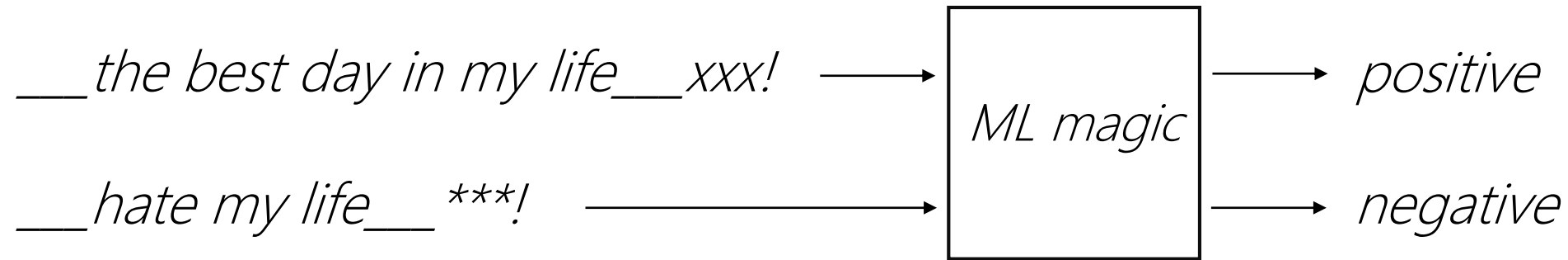


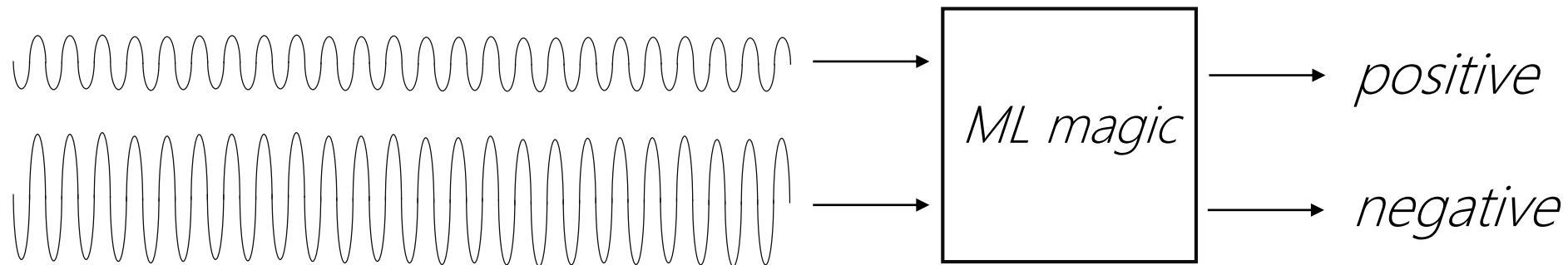
Speech sentiment analysis

My name is Kapelushnikov Andrey Sergeevich
Telegram @Andrey_Ma

Idea



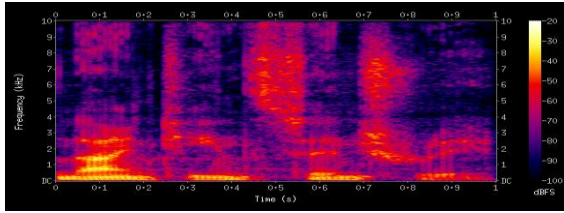
If people can write they may can be able to speak (but it isn't curtain)



First trouble(s)

- 1) No marked dataset*
- 2) No dataset*
- 3) No dataset at all*
- 4) No experience in dealing with sound*

Step №1



"Okay Librosa give me a spectrogram..."

Convolution

MaxPooling

...

Dense

...

OutputDense

[0, 1, 1, ..., 0, 0, 0]

Accuracy: 60% better then random...

Second **try**:

"Xgboost came to play with us. Forever..."

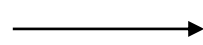
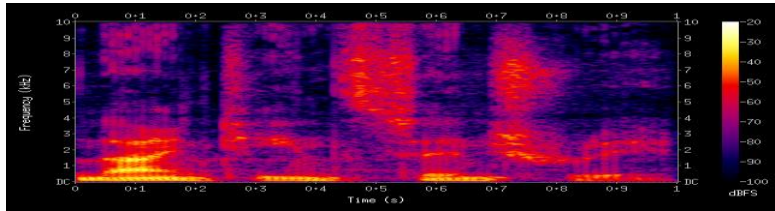
Simple file.wav opened in Python and loaded to array → Top Model → 64,5% accuracy

Warning! Don't **try** to repeat! Consequences aren't explored!

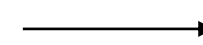
Very important thing in ML is feature extraction. Models can do without it, but results are worse than with prepared features.

finally:

"Okay Librosa give me the second spectrogram..."



Xgboost



77% accuracy

There may be other variants like models or ensembles from sklearn library or different variants of preprocessing.

Thanks for your attention!

You may **try** to ask some questions