

# LessonAble

Introduction to a brand new way of using the deep fake to create video lessons based on just text.

# It has been noted that...

the amount of time required to record a video lesson following a well-defined text is really **TOO HIGH**.



# An example..

This is the first video lecture of *Fundamentals of Computer Science* made by professor Carlo Sansone on the Federica EU platform.

This video lecture takes about 6 minutes but...

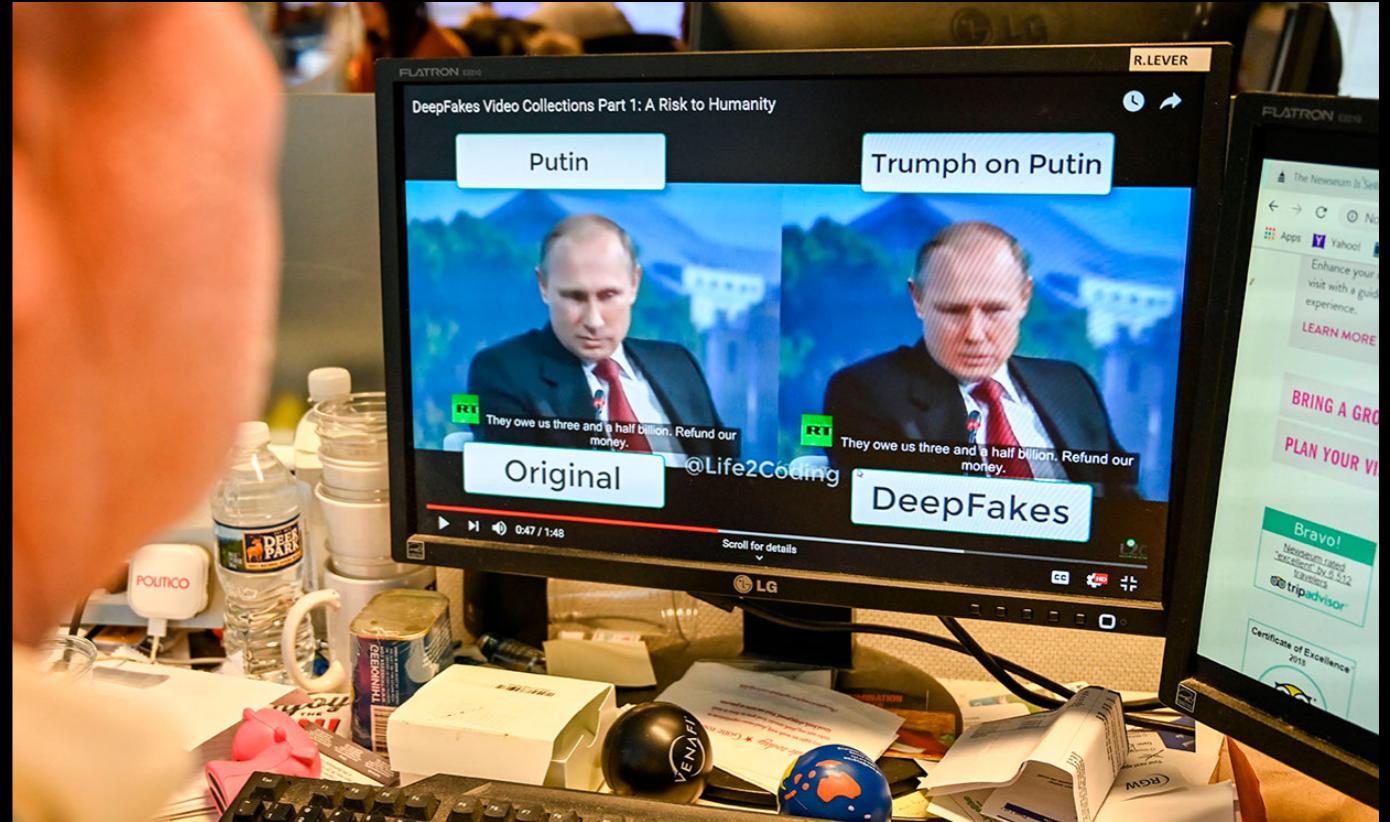
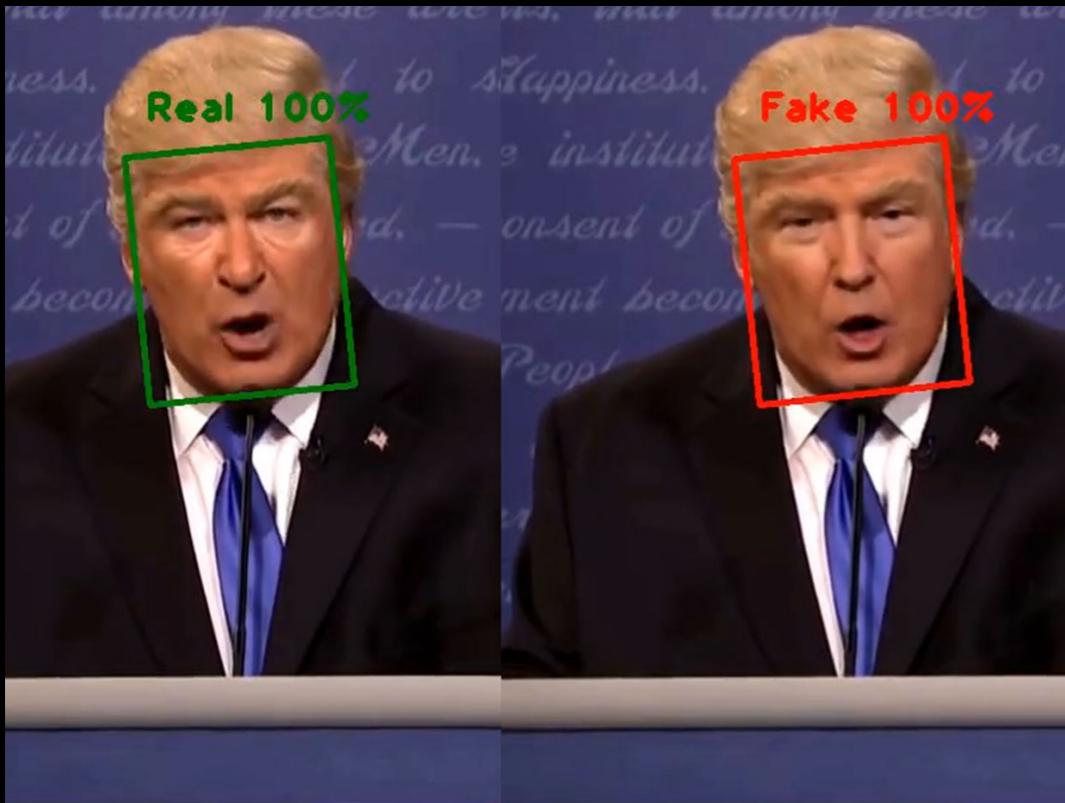


...the time to create a video like this typically takes professors to the **average 50-60 minutes.**

How can we create a video lesson  
**in a short time**, following a written  
text?

# Using Deep fakes!

Deepfake technology can seamlessly stitch anyone in the world into a video or photo they never actually participated in.

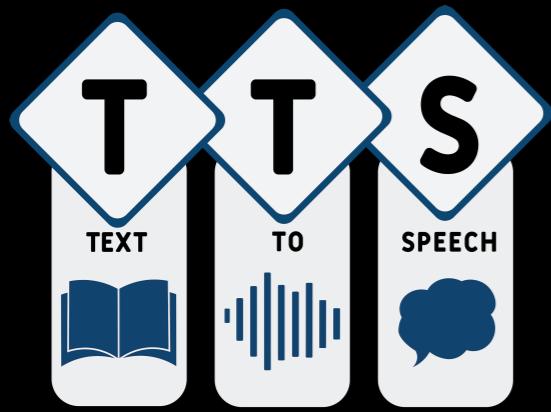


# Our solution

Based on a **maximum of one or two recordings** of the author of the video, we have the data necessary for the generation of a deep fake lesson.

So, given this recordings, we will be able to assume the ability to generate these **fake videos** by also using techniques like:

- Text to speech
- Lip syncing



# Github Libraries

## Text to speech

- **Text to speech with custom voice, Beta**

<https://cloud.google.com/text-to-speech/custom-voice/docs>

- **Microsoft Azure**

<https://speech.microsoft.com/portal>

- **Nvidia Flowtron**

<https://github.com/NVIDIA/flowtron>

## Lip syncing

- **Wav2Lip**

<https://arxiv.org/pdf/2008.10010.pdf>

[Colab Link](#)

# Github Libraries

## Face Swapping

- **FSGan**

<https://github.com/YuvalNirkin/fsgan>

- **DeepFaceLab**

<https://github.com/iperov/DeepFaceLab>

- **Motion Co-segmentation**

<https://github.com/AliaksandrSiarohin/motion-cosegmentation>

# Thank you