

DEEP FAKE



@codechips

Art Credit : @julienkaspart

@codechips

Cody



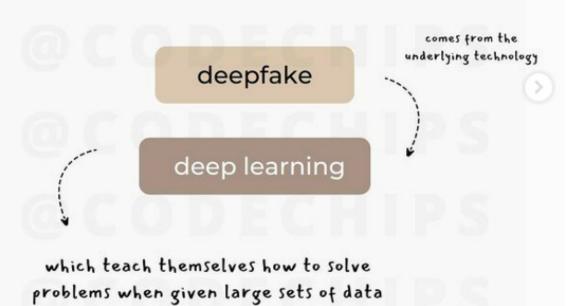
This is one such example of deepfake





Deep Fake

Deepfakes use deep learning artificial intelligence to replace the **likeness** of one person with another in video and other digital media



@codechips

○ Cody



How deep fake video works

The most common method uses deep neural networks involving autoencoders that employ a face-swapping technique



@codechips





First thing is to train the model

To do that 1st we need data (large amount)

We will need a Source and Target



With enough training, the neural networks will be able to create numerical representations of the features of each face.

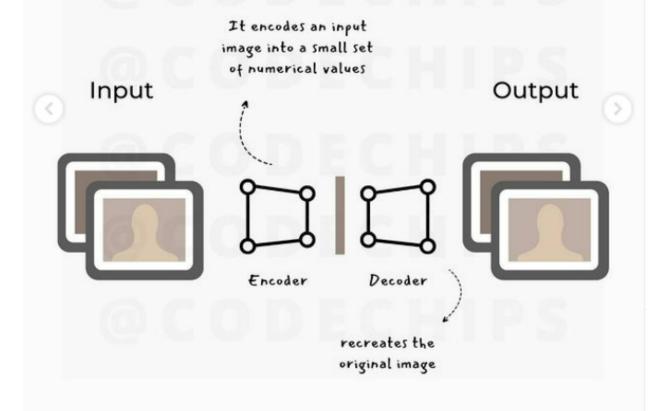
@codechips

▶ Cody



Autoencoders

An autoencoder is a special type of deep learning algorithm that performs two tasks



○ Cody

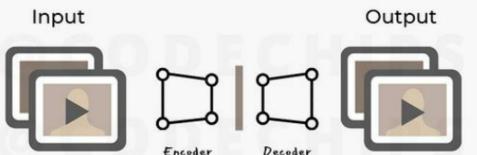
popupdev04@gmail.com

@codechips

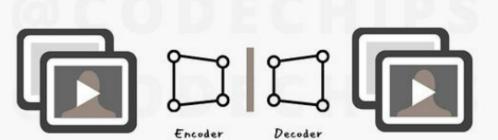


Deepfake autoencoders

Here one is trained on the face of the actor and another trained on the target



After the autoencoders are trained, you switch their outputs



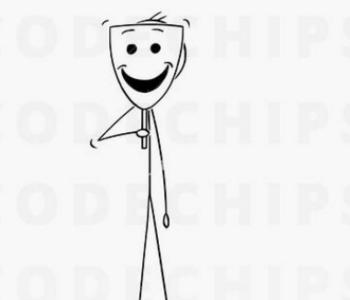
@codechips





In a nutshell, the autoencoder grabs the facial expression of one person and maps it onto the face of another person

@ C O D E C H I P S

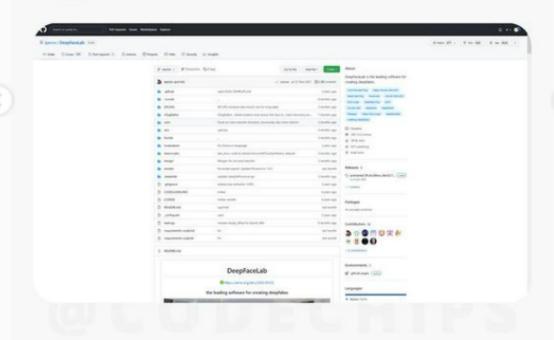


@codechips

▶ Cody



You can create your own deepfake videos too
One tool is an open source project iperov/DeepFaceLab



@codechips

▶ Cody