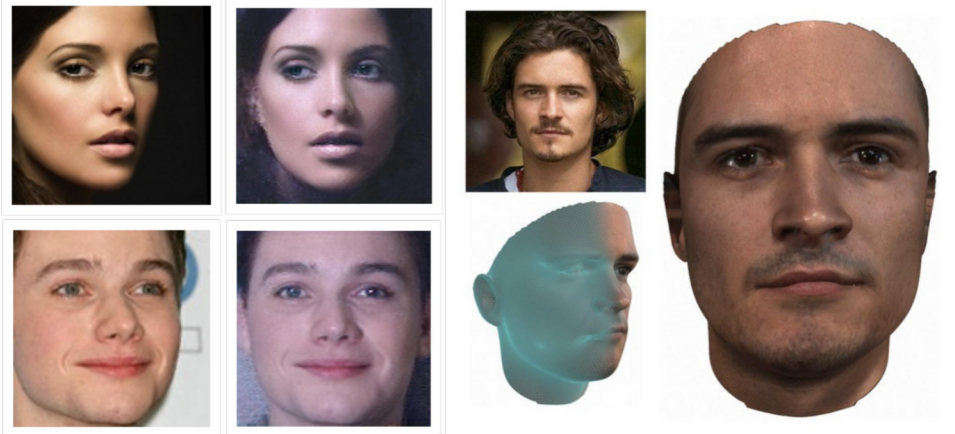
3D HUMAN BODY RECONSTRUCTION

Using Generative Adversarial Networks



GERGELY MAGYAR
FILIP HENDRICHOVSKÝ
MÁRIA VIRČÍKOVÁ
Matsuko

25.9.2019
VKM room

16:00
Start!

Use of neural networks in 3D reconstruction of the human face, showcase of a photorealistic reconstruction, holograms?
Find out the importance of GANs !

3D HUMAN BODY RECONSTRUCTION

Using Generative Adversarial Networks

Abstract: In recent years, deep-fake videos brought about security concerns and ethical use of artificial intelligence. The underlying method making such videos possible are Generative Adversarial Networks (GANs), introduced by Ian Goodfellow in 2014. In our talk, we will cover the theoretical background of these networks, their types, and how to train them. We will also show our use case of reconstructing the 3D facial structure from single images and demonstrate excellent results in photorealistic 3D people reconstructions. Thus, we are able to develop 3D Telepresence technology that enables the creation and streaming of people's 3D holograms. Unlike other solutions that capture people using the complex infrastructure of depth sensors, we reconstruct the 3D head and body in photo-realistic quality just from one single camera stream.

MATSUKO
マツコ

Data Analytics Meetings

GERGELY MAGYAR
FILIP HENDRICHOVSKÝ
MÁRIA VIRČÍKOVÁ
Matsuko

25.9.2019
VKM room

16:00
Start!

Use of neural networks in 3D reconstruction of the human face, showcase of a photorealistic reconstruction, holograms?
Find out the importance of GANs !