

## TOWARDS ENABLING PHOTOREALISTIC TELEPRESENCE By Danielle Belko

SIGGRAPH 2020 Emerging Technologies Program Chair Technical Program Manager at Facebook Reality Labs

in Pittsburgh, Pennsylvania

## Abstract:

In this talk, I will be describing the steps Facebook Reality Labs (FRL), Pittsburgh has taken towards enabling photorealistic telepresence: realtime social interactions in AR/VR environments that are indistinguishable from real life. Imagine having a digital avatar that looks, moves and sounds like you, that you can use to spend meaningful time with friends or family thousands of miles away.

In order to achieve the level of realism that gets us out of the uncanny valley, we have been using an approach we call Codec Avatars: the use of neural networks to address the computer vision (encoding) and computer graphics (decoding) problems in signal transmission and reception. In order to create these avatars, we have built some of the world's densest capture systems, which I will also describe in this talk.

## MON. NOVEMBER 2019 14:30-16:00 @本郷キャンパス工学部6号室3階セミナーAD室