

# With this technology, you can create your own virtual reality face with just one photo

It will help you play better and interact more naturally in the virtual reality world.

Three-dimensional **portraits or avatars** are considered the next development of selfie with current 2D cameras. In particular, the 3D images that represent each of these people are even more necessary so that users can role-play in the virtual reality world.

However, getting those images will require advanced virtual reality devices to capture the body's movements naturally. So far, large companies in VR equipment have not found an effective way to create 3D images for your face from a photo.

But now, a startup called **Loom.ai** is introducing a system, supposedly able to create authentic avatars only from a single 2D photo. Their technology uses a combination of computer vision techniques, machine learning and special effects from the film industry. You can see some of the celebrities' three-dimensional avatars below to see the progress of this technology. Each avatar is created only from a single image.



Avatar animation of billionaire Elon Musk.

The company's founder and CEO, Mahesh Ramasubramanian is a veteran of Dream Works Animation, where he has worked on films like Madagascar 3, Home and Shrek. Loom's CTO, Kiran Bhat helped build the system to capture facial expressions, and was the head of the R&D department for face effects of films like The Avengers and Pirates of the Caribbean.

*" The key to precisely building digital characters is to extract outstanding facial features that are recognizable on human faces in 3D images, for example with Mark Ruffalo's avatar version of Hulk in The Avengers. " Bhat said in the press release. "Loom.ai's new set of algorithms will streamline the process of building trustworthy 3D avatars for everyone, a process that used to be very expensive and used only for Hollywood actors with lower*

*bases floors of studios . "*



Actor Angelina Jolie.

However, there are still many details that this system cannot do well, such as hair, teeth, beautiful facial features and some other factors. All 3D avatars show the same number of expressions or emotions, similar to the example below. However, it is still a big step forward from the current tools in bringing a highly customized 3D avatar image into the virtual world that requires only one thing from users.

In addition, **Loom.ai is not the only startup working in this area** . Last week, a startup called **ItSeez3D** also announced a similar technology. In addition a group from Pinscreen and the University of Southern California also showed a software version supported by the deep neural network. However, no one has shown how to make moving avatars as convincing as Loom.ai's special visual effects.