

Disney Is Getting Into the Deepfake Game

This might not end well.

// BY [COURTNEY LINDER](#) JUL 1, 2020



- Scientists affiliated with Disney Research Studios have come up with a way to use [deepfakes](#) to swap out faces in high resolution for the first time.
- That could mean endless possibilities for future live-action films.
- The scientists are presenting their [paper](#) at this week's Eurographics Symposium on Rendering 2020.

There's a whole trove of blogs and YouTube videos devoted to face swaps of some of the most beloved Disney characters, from [Ariel with Ursula's face](#) to [Lilo and her doll Scrump](#).

But these are just cartoons. What if the Disney could seamlessly—and convincingly—switch out the faces of real actors in live-action films like the *Pirates of the Caribbean*

franchise?

New technology from Disney Research Studios could make it happen on the big screen for the first time. Four scientists have come up with the world's highest-resolution deepfakes, or synthetic media in which a computer program can use existing images to manipulate someone's likeness.

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What Is a Deepfake?

"To the best of our knowledge, this is the first method capable of rendering photo-realistic and temporally coherent results at megapixel resolution," the researchers say in a [paper](#) they'll present at this week's *Eurographics Symposium on Rendering 2020*.

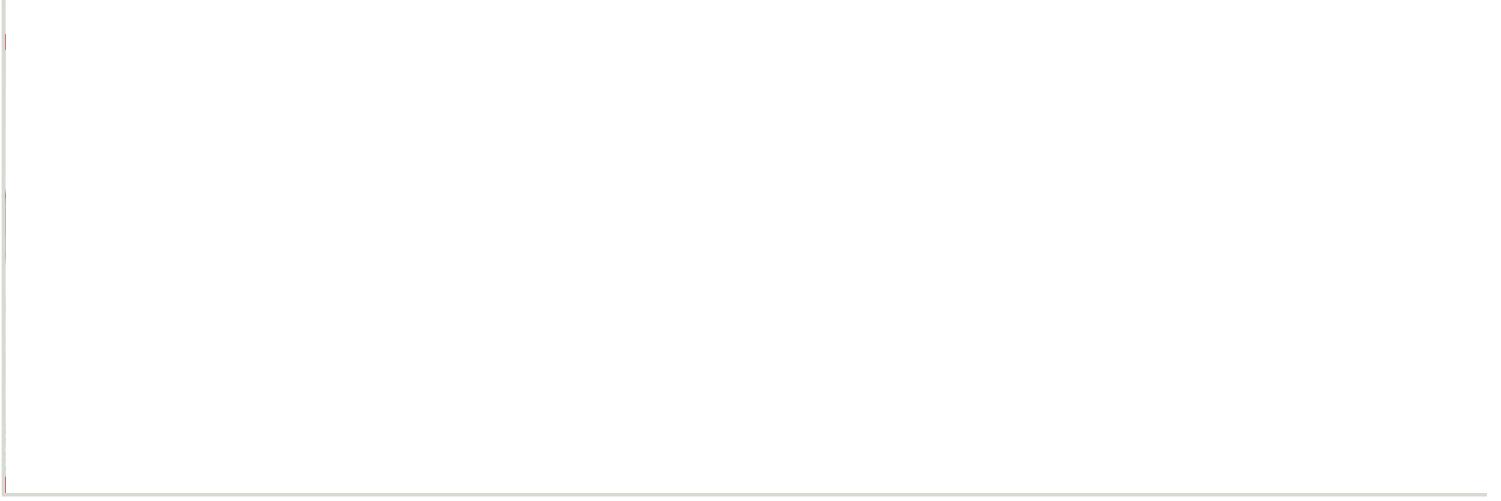
Sure, megapixel-level resolution doesn't sound groundbreaking, considering the resolution of some smartphones, like the Galaxy S20 Ultra, snaps photos at the megapixel scale in the [three-digit range](#). Still, it's a humble step up from current state-of-the-art deepfake tech.

The researchers note that [DeepFaceLab](#), a popular open-source deepfake system, could only create face swaps at 256 x 256 pixels, while their model could produce 1,024 x 1,024 pixel resolution.

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The ability to switch out the appearance of one face for another could be endlessly useful for a massive media company like Disney. Usually, it takes elaborate and labor-intensive visual effects (VFX) methods to make an actor appear younger, or to use footage of a deceased actor in a film that hasn't yet wrapped filming. Consider Paul Walker in *Furious 7*, Carrie Fisher in *Rogue One*, or the forthcoming movie starring the long-dead James Dean.

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Traditional VFX methods "require great care on set as well as extensive frame-by-frame animation and post-processing by digital-effects professionals," the authors say.

But they believe that, with continual improvement, their deepfake technology could cut down on the time and cost to create these convincing doubles.

Now all we have to do is hope this powerful technology doesn't get into the wrong hands.

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