

Seeing The Future (Through \$40,000 Goggles) At Stanford's Virtual Reality Lab

When [Mark Zuckerberg](http://www.forbes.com/profile/mark-zuckerberg/) needed to find out everything there was to know about virtual reality earlier this year, he didn't have to travel far for answers. The [Facebook](http://www.forbes.com/facebook-ipo/) CEO made an appointment for a tour of [Stanford University's](http://www.forbes.com/colleges/stanford-university/) [Virtual Human Interaction Lab](http://vhil.stanford.edu/), located a 10 minute drive away from his own campus.

Apparently Zuckerberg liked what he saw: Soon after, Facebook [bought Oculus VR](http://www.forbes.com/sites/briansolomon/2014/03/25/facebook-buys-oculus-virtual-reality-gaming-startup-for-2-billion/), the maker of the Oculus Rift headset, for \$2.1 billion.

While the results aren't usually so spectacular, that kind of visit is increasingly common, according to Jeremy Bailenson, VHIL's director and founder. "We have constant contact with corporations, most of whom at this point need to understand how the technology works, how it's going to apply to their business area and how you can use it to change human behavior," he says.

To learn what got Zuckerberg so excited, a team of us from FORBES went down to Stanford for a tour of our own recently. Bailenson put us through a number of simulations designed to demonstrate how people experience virtual environments and how VR can be a tool for improving lives. Wearing a \$40,000 headset called [the nVisor 111](http://www.nvisinc.com/configurator.php?product=48), Kashmir Hill experienced real vertigo while walking on a narrow plank over a nonexistent pit; learned to control her arms by moving her legs and vice versa; flew through the air as a superhero in a simulation designed to instill empathy; and spent 12 minutes as a coral reef, learning about ocean acidification.

I, meanwhile, met two virtual avatars, one old and the other fat. Seeing an avatar of yourself as an elderly person has been shown to influence people to save money for retirement, Bailenson explained, while seeing a fatter version of yourself motivates people to exercise. I also "rode a roller coaster" courtesy of an Oculus VR, and I can report that it was almost as much fun as the real thing (and probably more fun for my colleagues, who watched me ludicrously gripping the edge of my couch and gasping as I careened over the virtual tracks).



VHIL has been in existence since 2003, but for most of the years since, its researchers seemed to be exploring a future that was reluctant to arrive. Now that's finally changing, with Facebook, [Google](/companies/google/) and [Sony](/companies/sony/) all making big bets on vision-based computing platforms. ("We're making a long-term bet that immersive augmented and virtual reality will become a daily part of people's lives" was how [Zuckerberg](http://www.forbes.com/sites/jeffbercovici/2014/03/25/move-over-glass-with-oculus-acquisition-facebook-out-goggles-google/) characterized the Oculus acquisition.)

"Jaron Lanier, the guy who coined the term virtual reality, always said that it's never going to matter as long as you have to have million-dollar laboratories at universities to get it out there," Bailenson says. "Now that the giants care about VR, what you're seeing is they're getting lighter, they're getting more comfortable, they're getting cheaper, and the quality is quite good."