

# The 2020 VGTC Virtual Reality Technical Achievement Award



## Jeremy Bailenson

The 2020 Virtual Reality Technical Achievement Award goes to Jeremy Bailenson in recognition of his research on psychological effects of Virtual Reality experiences. Professor Bailenson has been building and testing avatar-based virtual reality systems since the late 1990s. His early work at UC Santa Barbara focused on developing the algorithms, theories, and psychological research around *transformed social interaction*—the idea of automatically altering tracking data to strategically render social interaction, breaking conversational physics to amplify or suppress nonverbal signals in real-time for strategic purposes. Upon arriving at Stanford in 2003, his work shifted to building VR experiences to train specific domain knowledge—for example climate change or empathy—and then run large scale experiments to learn the extent to which VR uniquely changes behavior, isolating the particular technological affordances which drive those changes. Throughout his career he has built machine learning models which take as input VR tracking data to understand the relationship between body movement and learning. Most recently he and his graduate students have focused on avatars in augmented reality, creating new telepresence systems and understanding the psychological implications of “seeing ghosts” in everyday life.



Jeremy Bailenson is founding director of Stanford University’s Virtual Human Interaction Lab, Thomas More Storke Professor in the Department of Communication, Professor (by courtesy) of Education, Professor (by courtesy) of Symbolic Systems, a Senior Fellow at the Woods Institute for the Environment, and a Faculty Leader at Stanford’s Center for Longevity. He earned a B.A. *cum laude* from the University of Michigan in 1994 and a Ph.D. in cognitive psychology from Northwestern University in 1999. He spent four years at the University of California, Santa Barbara as a Post-Doctoral Fellow and then an Assistant Research Professor.

He has published more than 150 academic papers, in interdisciplinary journals such as *Science*, the *Journal of the American Medical Association*, and *PLoS One*, as well domain-specific journals in the fields of communication, computer science, education, environmental science, law, marketing, medicine, political science, and psychology. His work has been continuously funded by the National Science Foundation for over 15 years. He is the recipient of the Dean’s Award for Distinguished Teaching at Stanford.

Bailenson consults *pro bono* on Virtual Reality policy for government agencies including the State Department, the U.S. Senate, Congress, the California Supreme Court, the Federal Communication Committee, the U.S. Army, Navy, and Air Force, the Department of Defense, the Department of Energy, the National Research Council, and the National Institutes of Health.

His first book *Infinite Reality*, co-authored with Jim Blascovich, emerged as an Amazon Best-seller eight years after its initial publication, and was quoted by the U.S. Supreme Court. His second book, *Experience on Demand*, was reviewed by *The New York Times*, *The Wall Street Journal*, *The Washington Post*, *Nature*, and *The Times of London*, and was an Amazon Best-seller.

He has written opinion pieces for *The Washington Post*,

*CNN*, *PBS NewsHour*, *Wired*, *National Geographic*, *Slate*, *The San Francisco Chronicle*, and *The Chronicle of Higher Education*, and has produced or directed six Virtual Reality documentary experiences which were official selections at the Tribeca Film Festival. His lab’s VR experiences have exhibited publicly at dozens of museums and aquariums.

## Award Information

The IEEE VGTC Virtual Reality Technical Achievement Award was established in 2005. It is given every year to recognize an individual for a seminal technical achievement in virtual and augmented reality. VGTC members may nominate individuals for the Virtual Reality Technical Achievement Award by contacting the awards chair, Henry Fuchs, at [vgtc-awards@vgtc.org](mailto:vgtc-awards@vgtc.org).