

---

# HoloART Video Showcase: Painting with Holograms in Mixed Reality

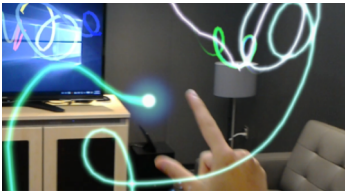


Figure 1: 3D representations of different textures are created in real time using mixed reality. The user can paint in the air using the tip of the index finger.

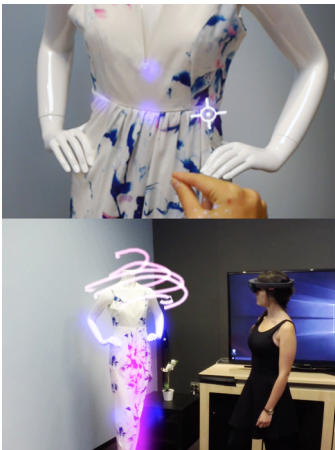


Figure 2: The user can spray paint on top of the physical space using the pinch gesture.

**Judith Amores**

MIT Media Lab  
75 Amherst Street,  
Cambridge, USA  
amores@mit.edu

**Jaron Lanier**

Microsoft Research  
Redmond, Washington, USA  
jalani@microsoft.com

Permission to make digital or hard copies of part or all of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for third-party components of this work must be honored. For all other uses, contact the Owner/Author.

Copyright is held by the owner/author(s).

CHI'17 Extended Abstracts, May 06–11, 2017, Denver, CO, USA

ACM 978-1-4503-4656-6/17/05.

<http://dx.doi.org/10.1145/3027063.3049787>

**Abstract**

We propose *HoloART*, a new media art that explores the use of holograms in mixed reality for creative self expression. We designed a system that allows the user to turn their physical environment into a canvas where digital holograms and physical objects co-exist in the real and virtual world. Users are able to virtually spray and splatter *hologram paint* on top of physical objects and surfaces as well as painting in the air by only using their hands. The content grows dynamically, following the natural movements of the user. The system is self-contained and does not require hand controllers or positional tracking sensors on the space. This video accompanies our CHI paper and Art Installation [1].

**Author Keywords**

Interactive Media Art; Mixed Reality; Art Exhibition; Digital Art; New Media; Holograms; Performance Art; Interaction; Interdisciplinary; Installation

**ACM Classification Keywords**

H.5.m. Information interfaces and presentation: Miscellaneous

**References**

1. Amores J., Lanier J. 2017. HoloART: Painting with Holograms in Mixed Reality. In *Proc. of CHI 2017*. <http://dx.doi.org/10.1145/3027063.3050435>