

# UI Research

Vision Videos

HCI and UI Research Topics

## Envisioning the Future of Interaction

- Many examples of videos that provide visions of the future
  - [https://visionsofcomputing.wiki.cs.st-andrews.ac.uk/index.php/Vision\\_videos](https://visionsofcomputing.wiki.cs.st-andrews.ac.uk/index.php/Vision_videos)



Prediction of the home computer (1966)



Apple "Knowledge Navigator" (1987)



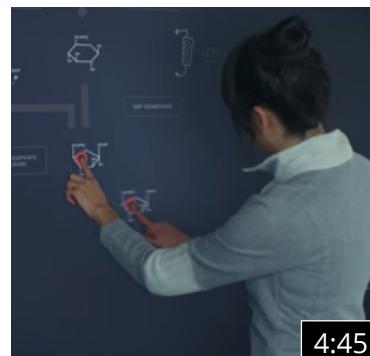
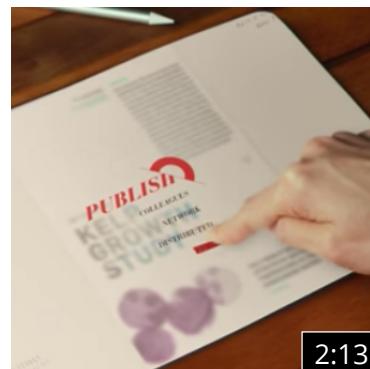
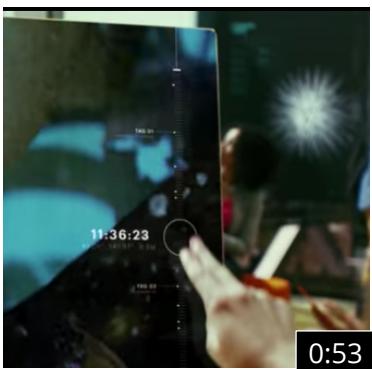
Sun Microsystems "Starfire", (1987)



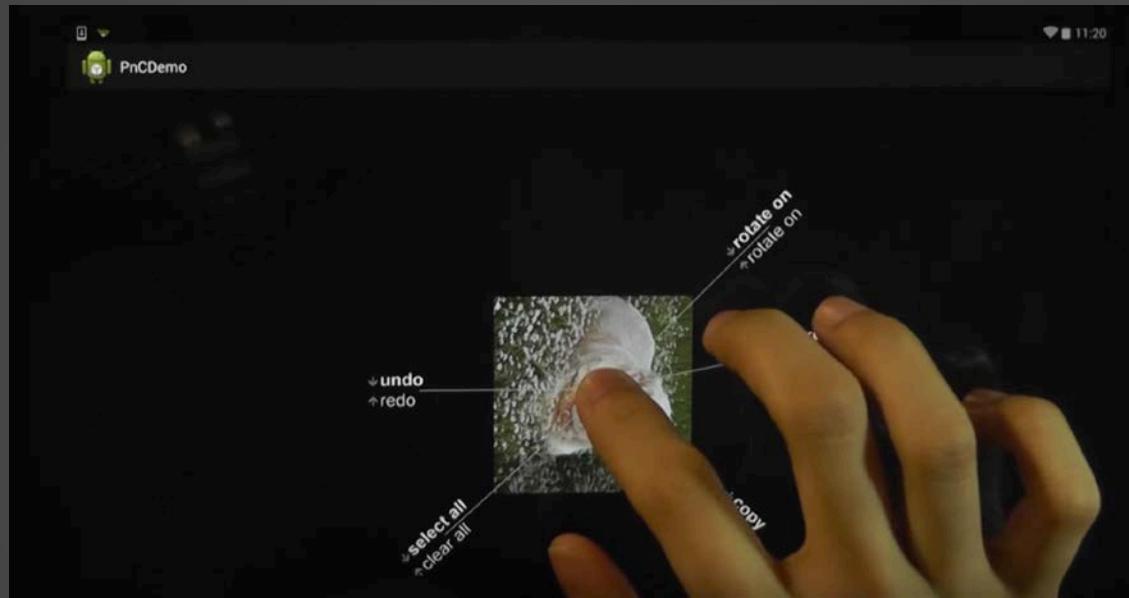
Microsoft: Productivity Future Vision (2015)  
- <https://youtu.be/w-tFdreZB94> (6:20)

UI Research 3

## Touch Gestures



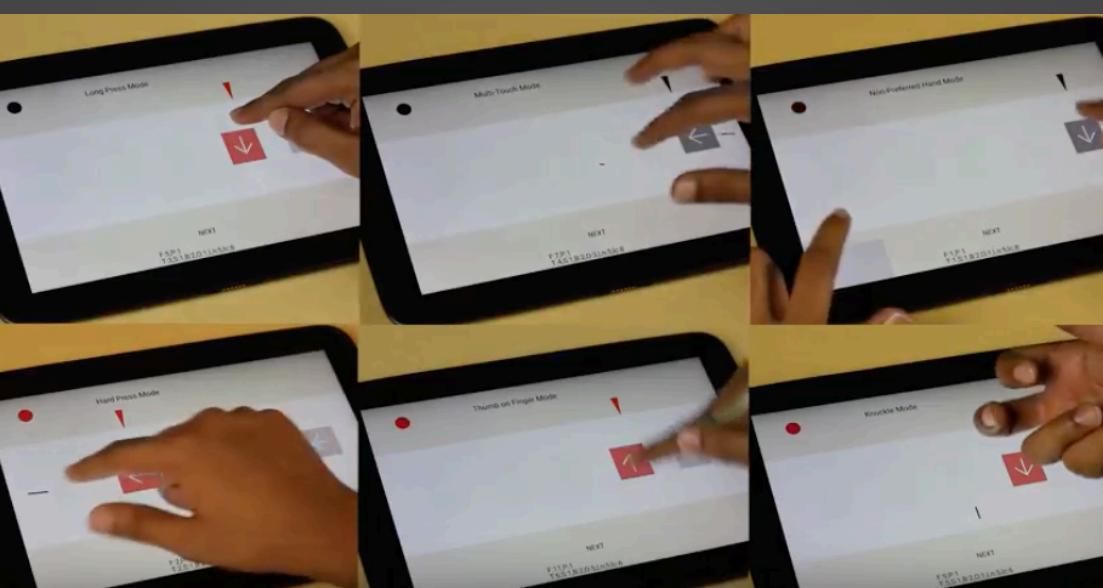
UI Research 4



### Pin-and-Cross

- <https://youtu.be/hrMkPq4uxJs> (4:00)

UI Research 5

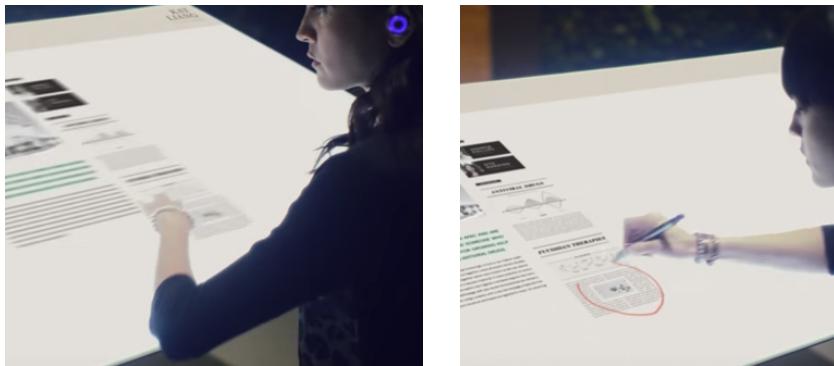


### Mode Switching Techniques in Touch-based User Interfaces (2017)

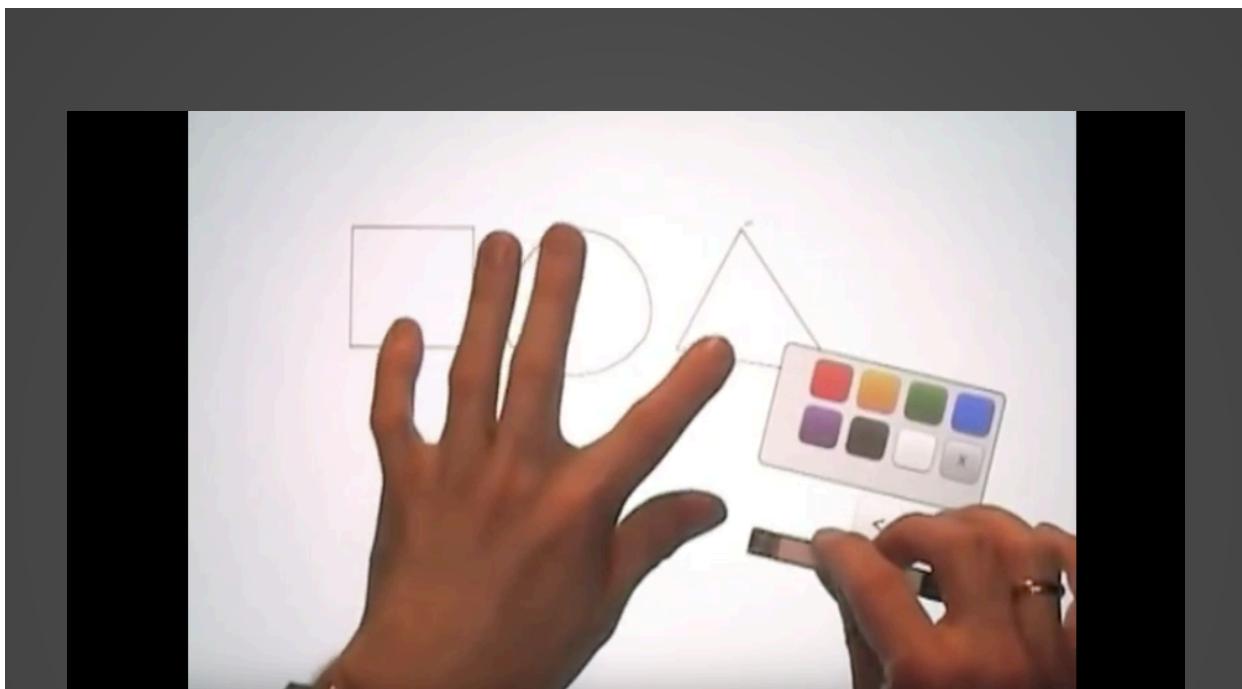
- <https://youtu.be/CtcN9kpQy9s> (2:00)

UI Research 6

## Pen+Touch Interaction



UI Research 7



Conté: Multimodal Input Inspired by an Artist's Crayon

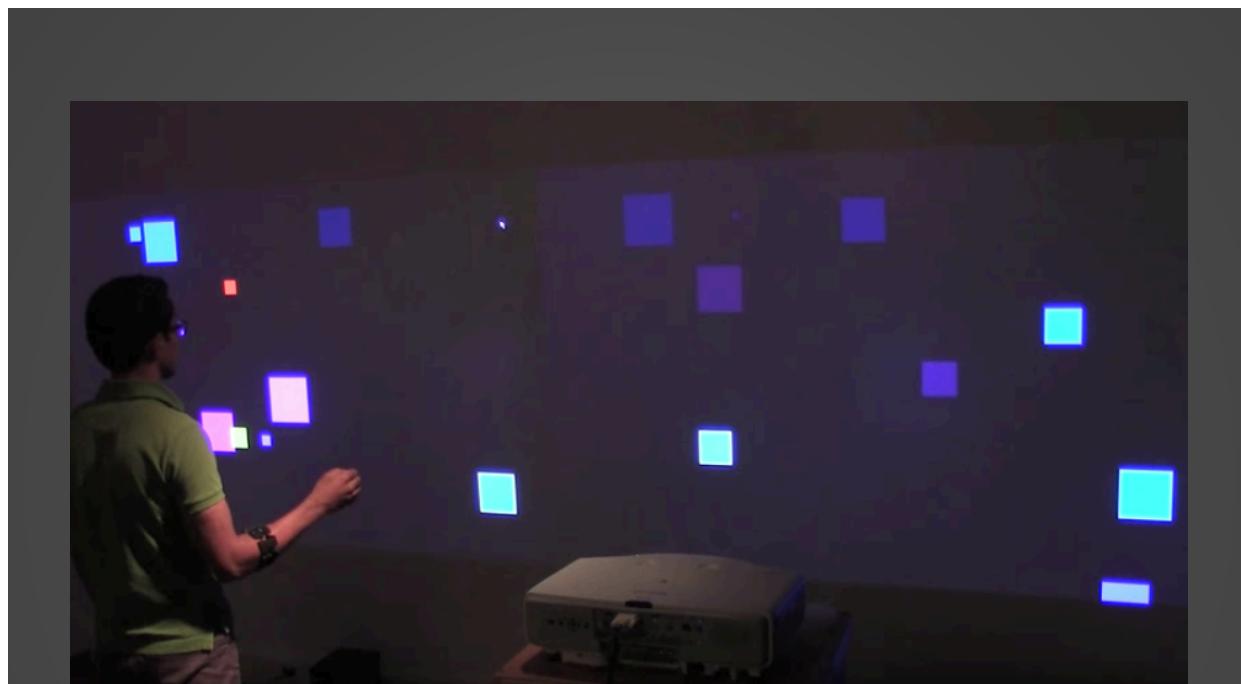
- [https://youtu.be/HDqT\\_oKM7j8](https://youtu.be/HDqT_oKM7j8)

UI Research 8

## Mid-air Bare-hand Input

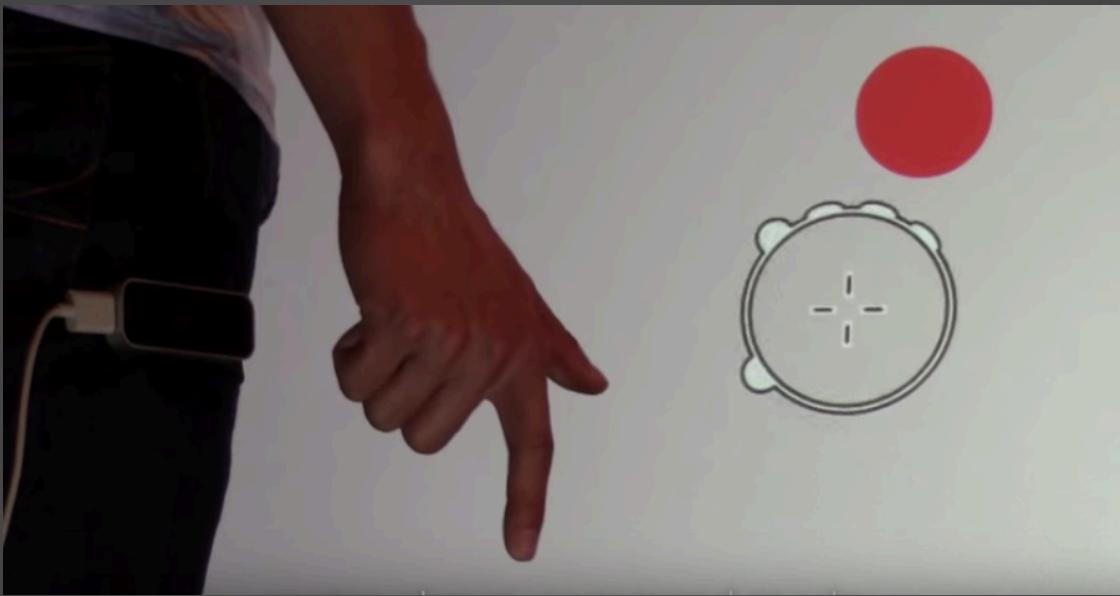


UI Research 9



Myopoint: Pointing and Clicking Using Forearm Mounted EMG and IMU (2015)  
- [https://youtu.be/15wByThgX\\_U](https://youtu.be/15wByThgX_U) (2:30)

UI Research 10



Gunslinger: Subtle Arms-down Mid-air Interaction (2015)  
- <https://youtu.be/lebeVS0oXtc> (3:00)

UI Research 11

## Wearables



3:10



3:46

12



Doppio: A Reconfigurable Dual-Face Smartwatch for Tangible Interaction (2016)  
- <https://youtu.be/7XkcCNEohUM> (5:00)

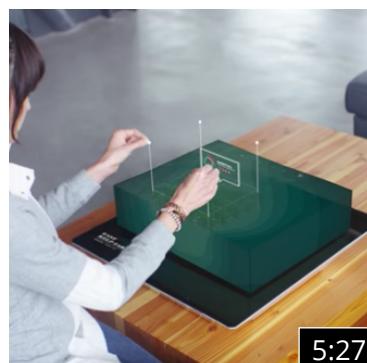
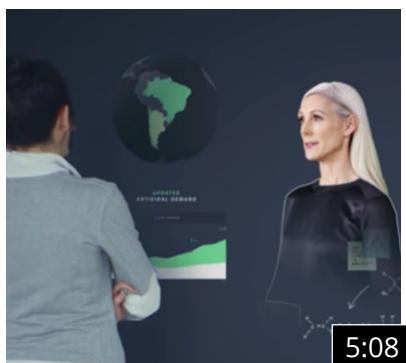
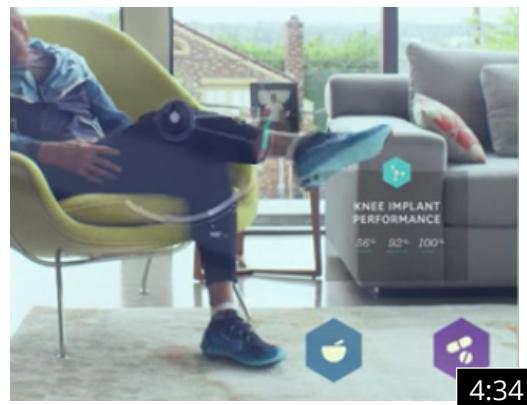
UI Research 13



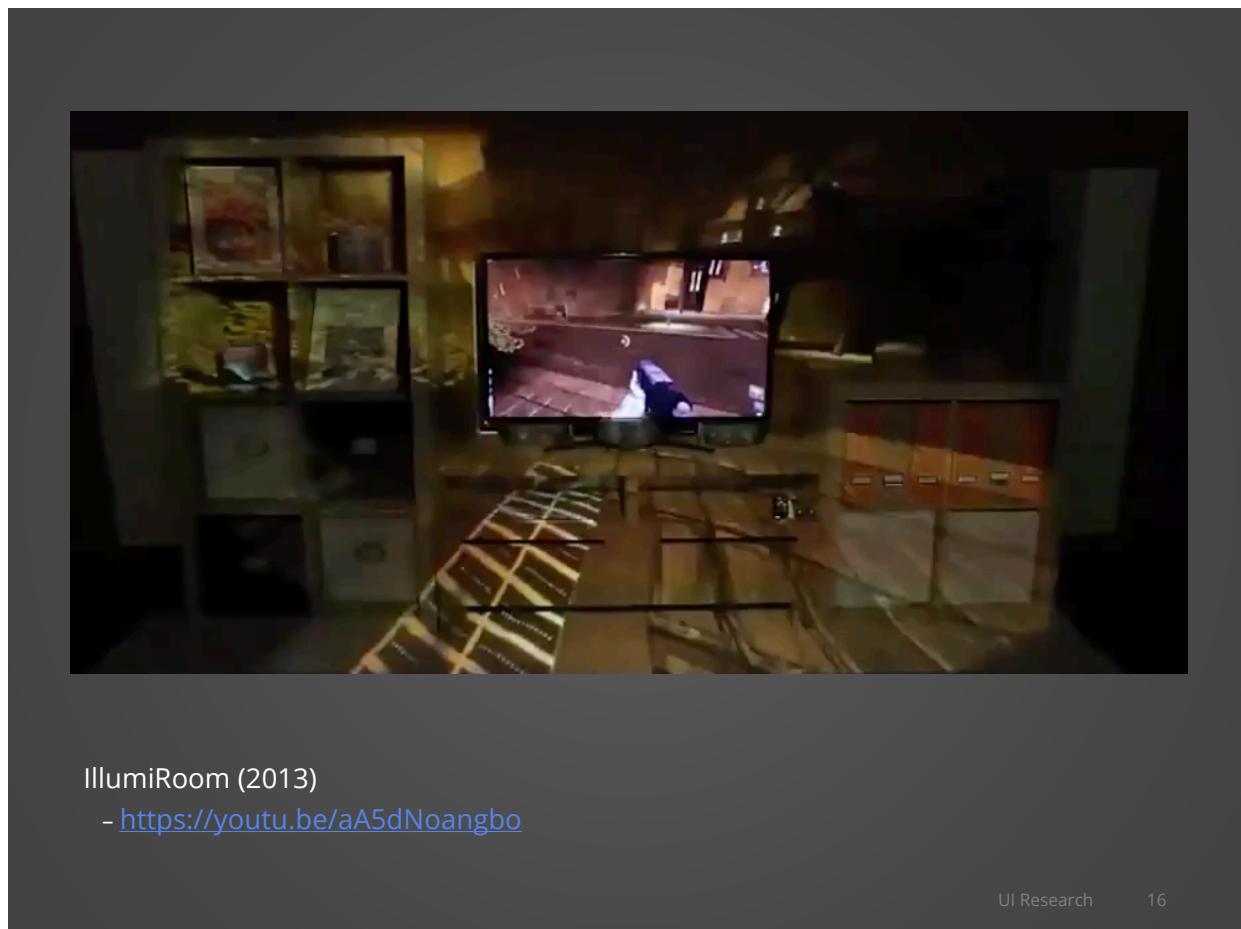
Cito: An Actuated Smartwatch for Extended Interactions (2017)  
- <https://youtu.be/1Ij14i3-Lac> (5:00)

UI Research 14

## Mixed Reality and Augmented Reality



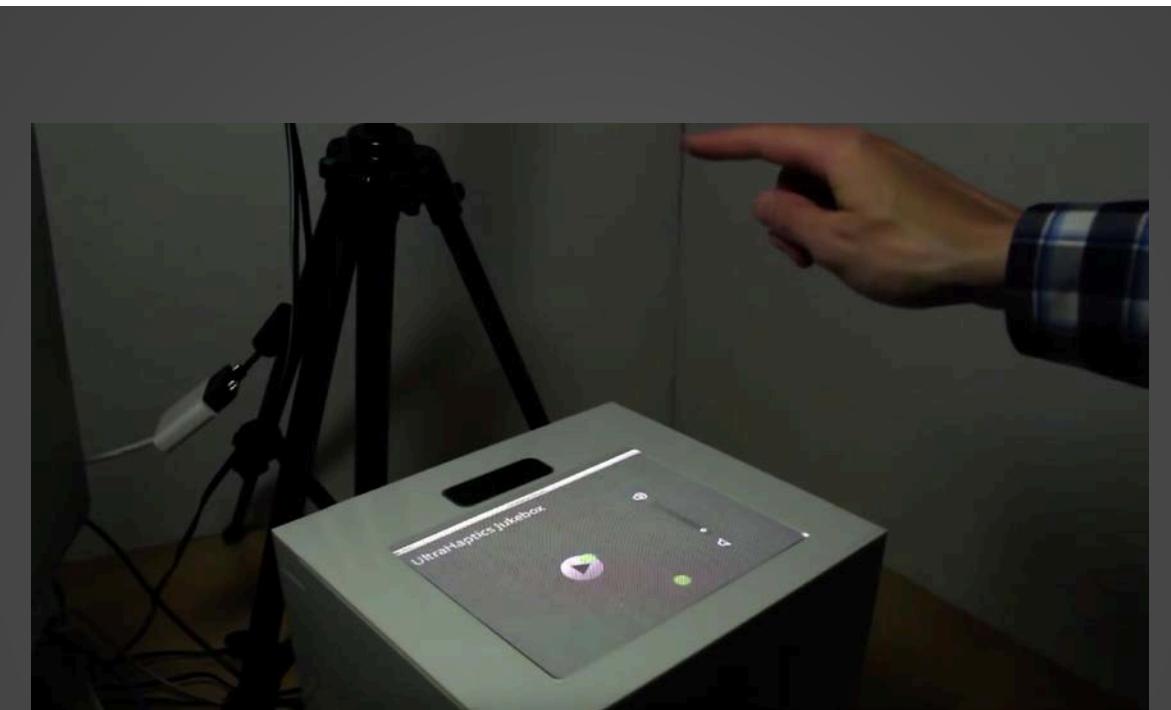
UI Research 15





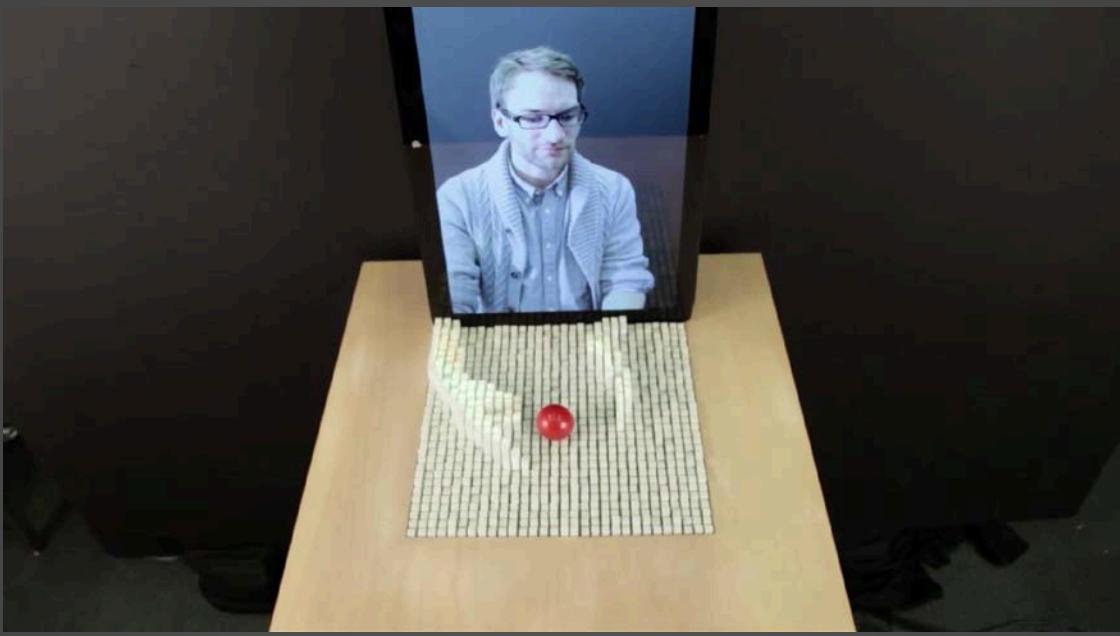
HoloDesk: Direct 3D Interactions with a Situated See-Through Display (2011)  
- [https://www.youtube.com/watch?v=jHL5tJ9ja\\_w](https://www.youtube.com/watch?v=jHL5tJ9ja_w) (4:00)

UI Research 17



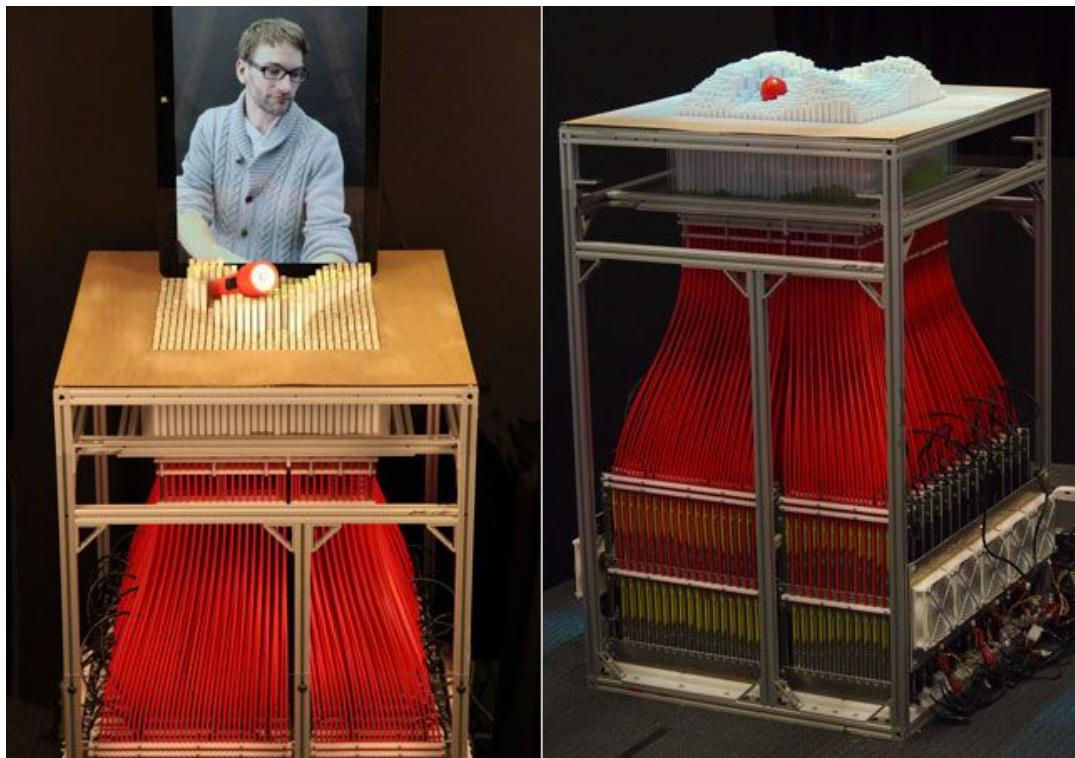
UltraHaptics: Multi-Point Mid-Air Haptic Feedback for Touch Surfaces  
- <https://youtu.be/2QkbVr4j7CM> (3:40)

UI Research 18

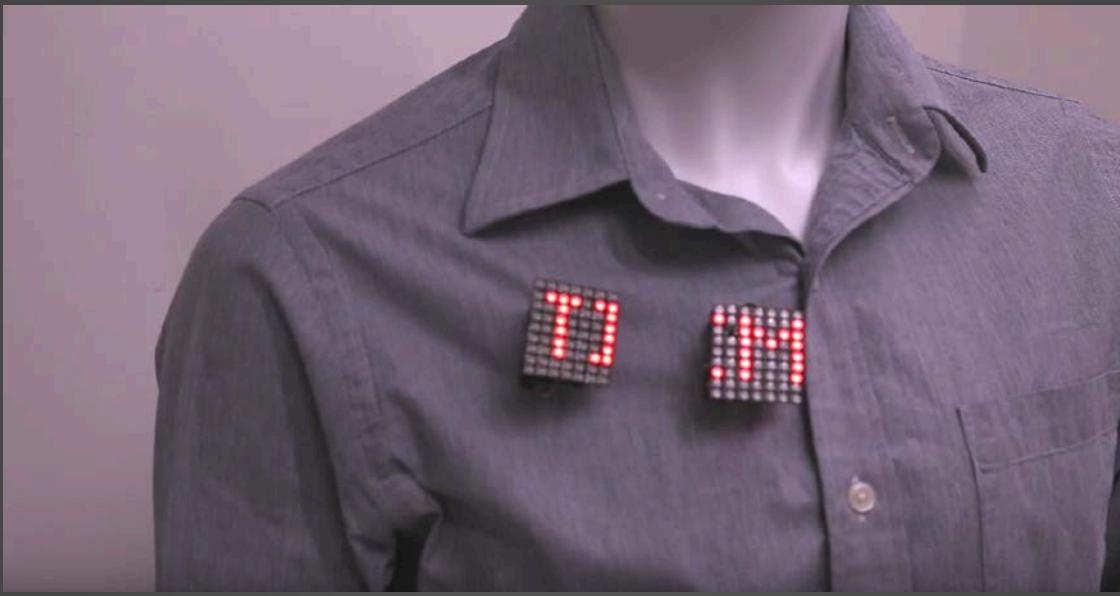


inFORM - Interacting With a Dynamic Shape Display (2013)  
- <https://vimeo.com/79179138> (3:30)

UI Research 19



UI Research 20



Rovables: Miniature On-Body Robots as Mobile Wearables (2016)

- <https://youtu.be/IhIOLLE0ugg> (0:30)