

A woman with long blonde hair, seen from the back, is wearing a black VR headset. She is pointing her right index finger towards a large, glowing blue and green globe of the Earth. The globe is positioned in the center-left of the frame and has white orbital lines around it. The background is a dimly lit room with wooden bookshelves filled with books. The overall scene suggests a virtual reality experience in a library or study.

# Virtual Reality (VR) Augmented Reality (AR) & Mixed Reality (MR)

# Virtual Reality (VR)

- Fully immersed – you do not see the real world around you
- Completely simulated environment where you are taken to a different place – perhaps a different time!
- You can control what you're looking at and where you're going



# Virtual Reality (cont'd)

- Still emerging / developing
  - Can be expensive
  - Can make some people feel nauseous
  - More content and experiences are needed
  - But \$millions\$ being poured into VR by companies with deep pockets
  - We're just getting started!







# VIRTUAL REALITY





NETFLIX

LAND'S END

# Oculus Experiences

Endless worlds await.

[Explore Now](#)

DRIFT

TENNIS ONLINE

ADRIFT

EDGE NOWHERE

ELITE DANGEROUS

EVE GUNJACK

PROJECT CARS



# Virtual Reality (cont'd)

- Very useful in education
- Visit ancient Rome for example
- Or virtually visit a museum







## INSIGHTS

# Classroom Technology Brings Virtual Field Trips to K-12 Students

EDUCATION



# Virtual Reality (cont'd)

- Also very useful in architecture and in the construction industry
- Can better design and envision a space







# Virtual Reality (cont'd)

- Meet other people in virtual rooms
- Share displays/screens with others





# Virtual Reality (cont'd)

- New tools continue to be developed that help people use VR to be creative



# Augmented Reality (VR)

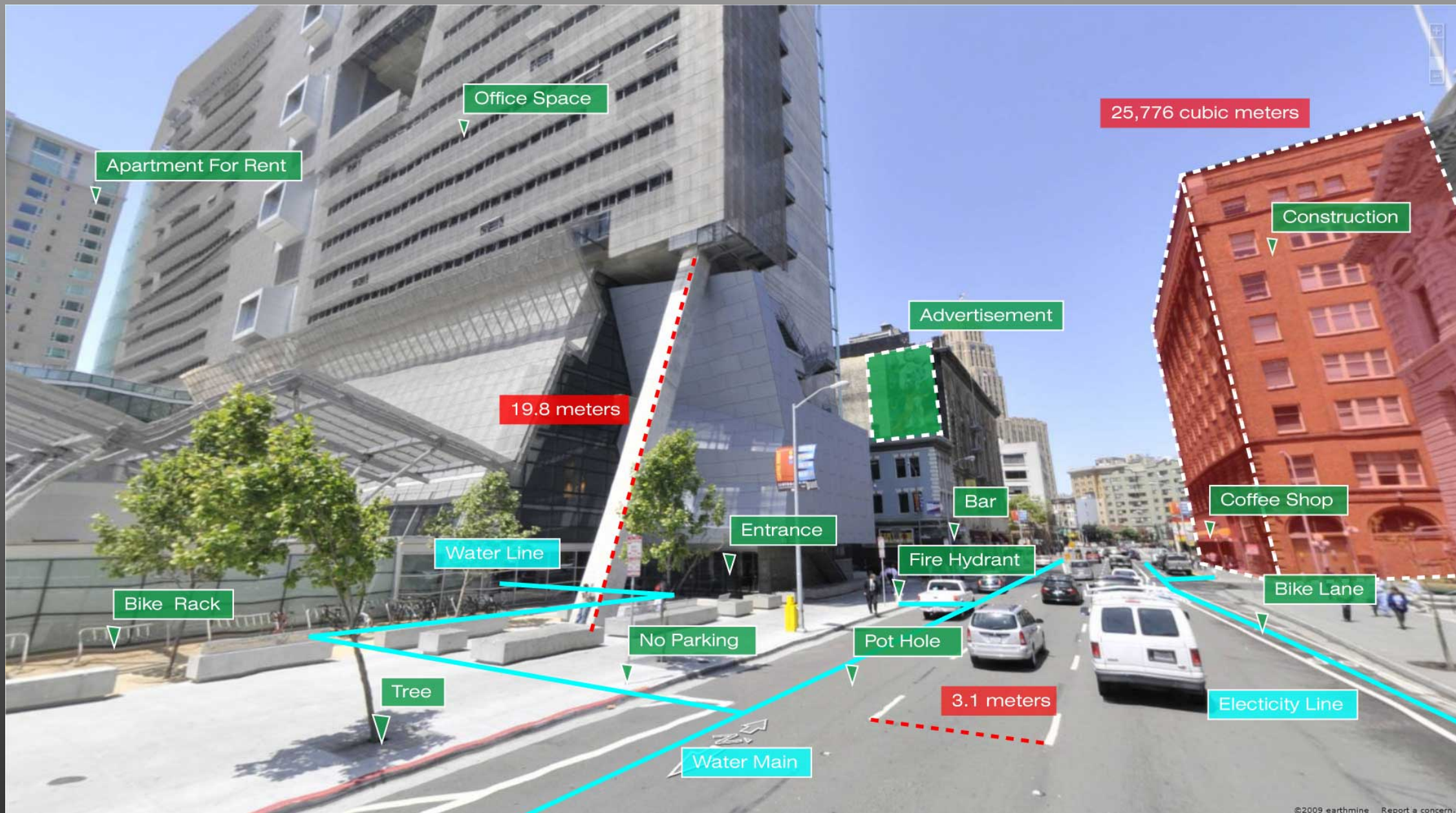
- Unlike in VR, you can see the real world around you, but with graphic overlays, 3D models, and videos on it
- AR superimposes computer-generated images on a user's view of the real world















McDonalds

0.1 mi

Partner ATM



US Bank

2.8 mi

Full Service Branch



US Bank

2.8 mi

Full Service Branch



Duane Reade

2.8 mi

Non-partner ATM



7-Eleven

0.8 mi

Non-partner ATM



Wells Fargo

2.8 mi

Non-partner Branch

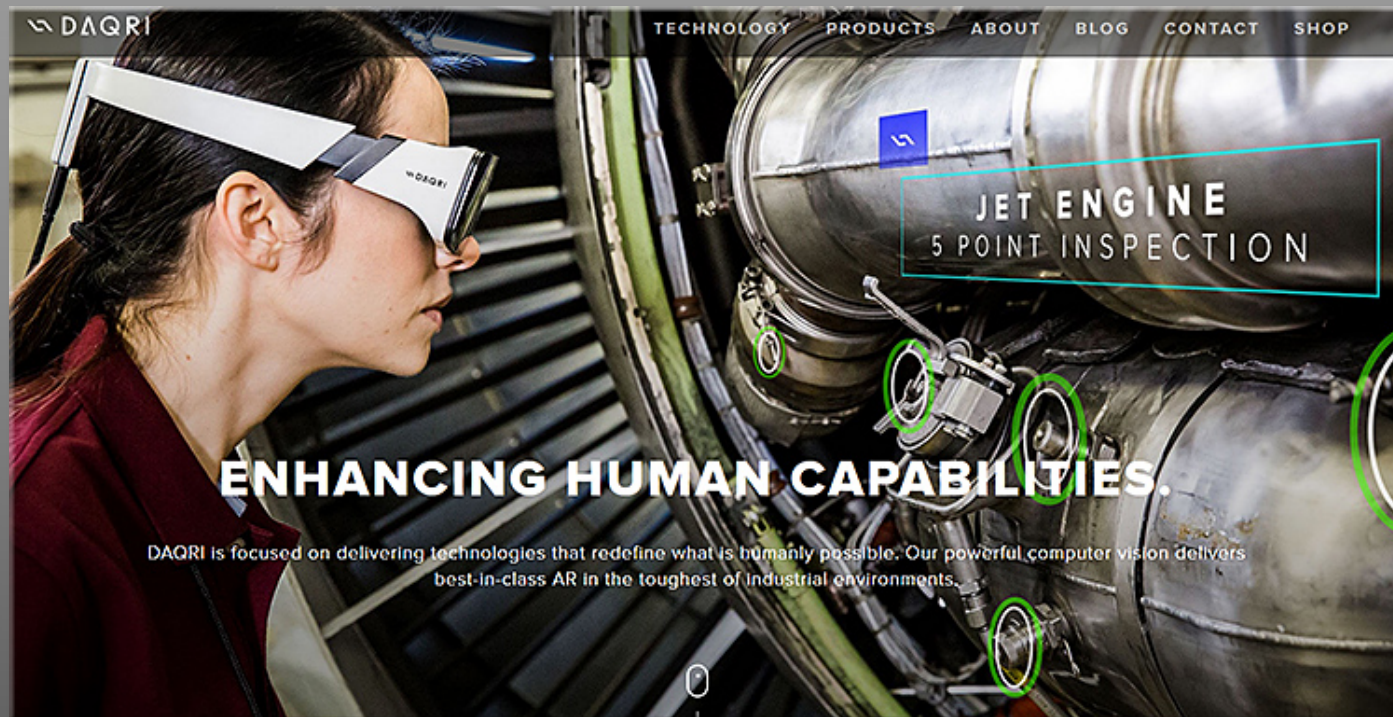
Closest  
One

# Augmented Reality (cont'd)

- Applications in technical support and in troubleshooting
- Fixing engines, elevators, and more
- Even bring in remote experts
- More educationally-related applications to arrive as AR goes mainstream







## DAQRI SMART GLASSES™

The DAQRI Ecosystem gets a new form factor that is forward-thinking and forward-looking.









# Mixed Reality (MR)

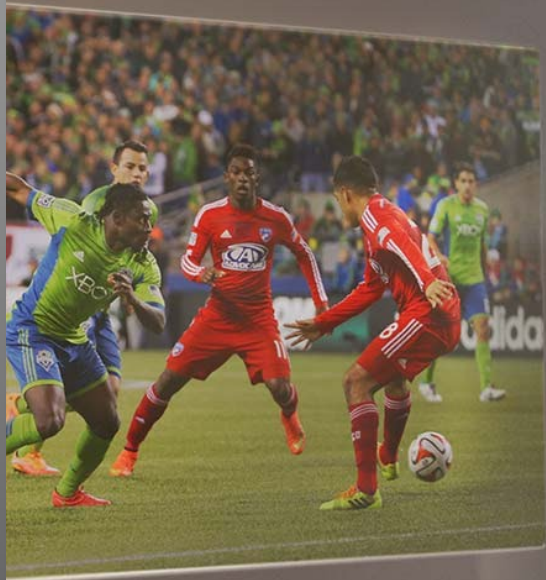
- Very similar to AR, but a device can scan the real-world environment around you and can interact with that environment
- Additional technologies and affordances are involved
- Best example is Microsoft's HoloLens device











Maui

Mon 71°F  
Tue 74°F  
Wed 76°F

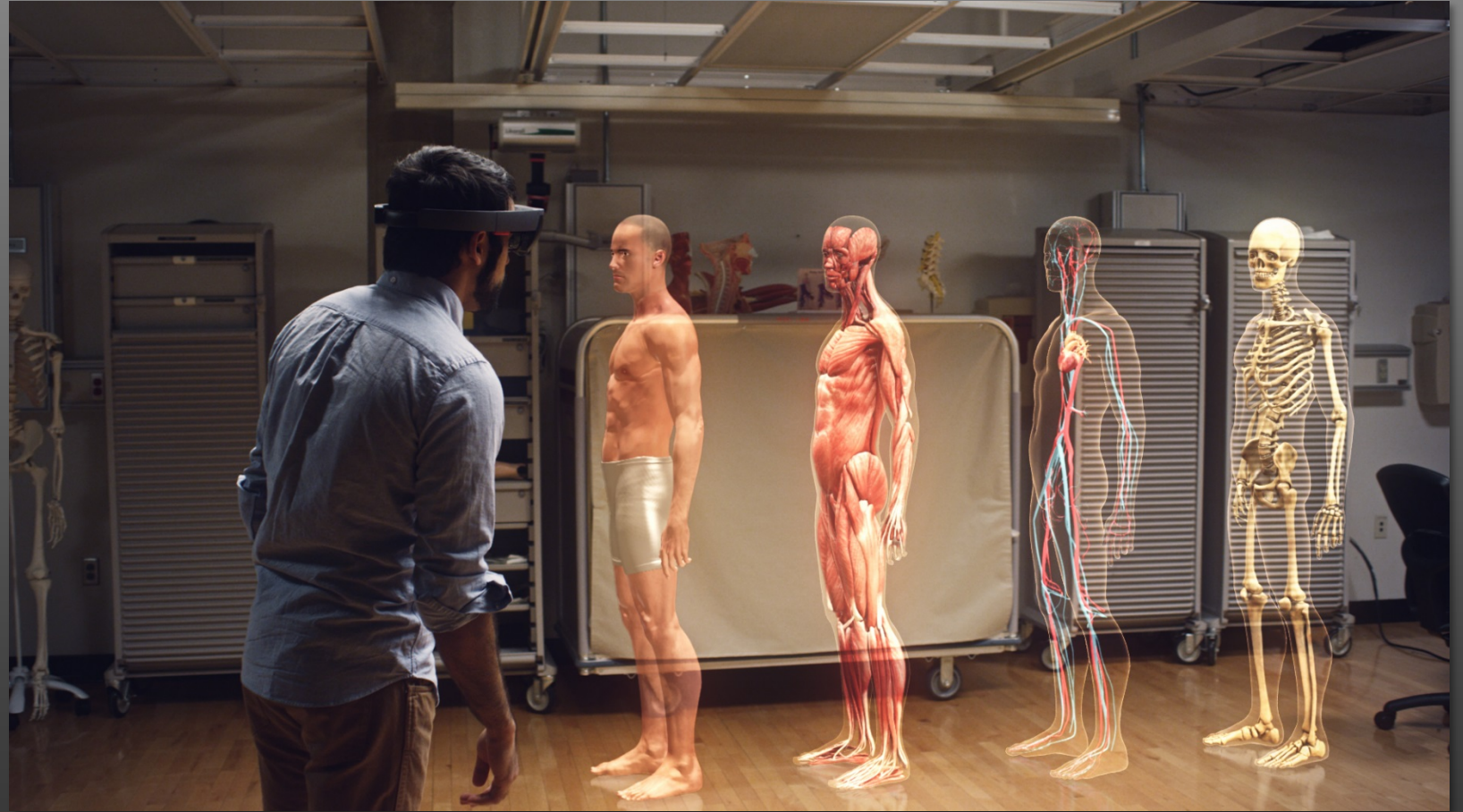




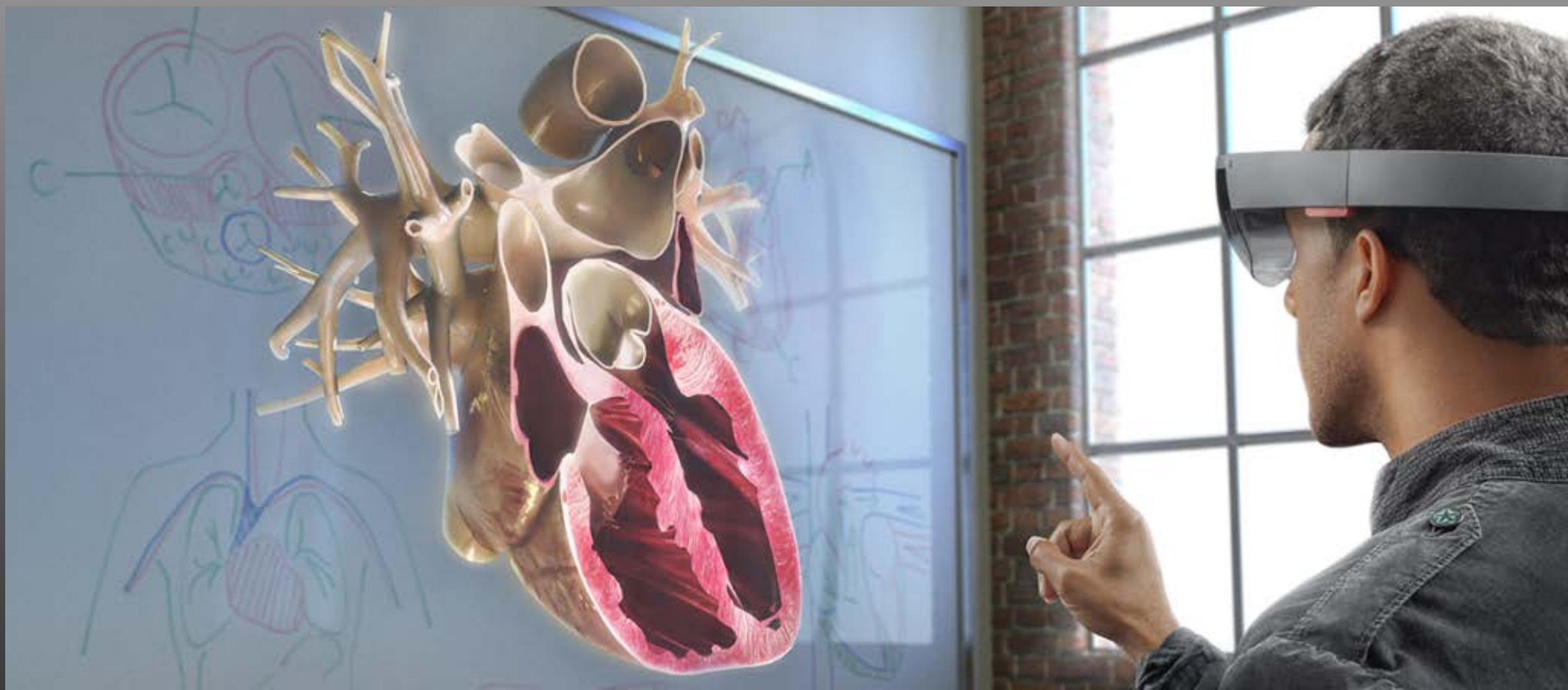


# Mixed Reality (cont'd)

- Microsoft is working with Case Western Reserve U. and the Cleveland Clinic
- Developing new ways to learn about human anatomy







# Mixed Reality (cont'd)

- Also useful in technical support, troubleshooting, fixing things
- Can bring in remote experts
- More educationally-related applications to arrive as MR goes mainstream







