Augmented Reality

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4 Who's leading the pack?

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Tech

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- Augmen than Vir
- ArchaeoCommer
- A lot of
- Aim to c





















Short History

- Boeing's Computer Services' Adaptive Neural Systems Research and Development Project in 1990
- AR system for the US Air Force in 1992
- Dancing in Cyberspace in 1994
- ♦ ARToolKit in 1999
- ♦ ARQuake in 2000
- Mobile Apps in 2008

Hardware

◆ The basic hardware requirement of AR is camera, medium quality graphic unit, processor and common sensors like accelerometer, GPS, Solid State Compass.

• Augmented reality displays with optical projection systems, monitors, hand held devices and Head-mounted displays.

HMD

♦ HMD is a display device which worn on the head or part of human body that has a small display optic in front of the eyes. One eye version called as monocular HMD or each eye version called as binocular HMD.

♦ HMD's use both Augmented Reality and Virtual Reality.

HUD

♦ HUD is any transparent display that presents data without blokcing users to look away from their usual viewpoints.

♦ HUD's initially developed for military aviation





Bionic Lenses

- Bionic lenses are the tech version of contact lenses.
- Bionic lenses used in US Military.



EyeTap

♦ An EyeTap is a device that is worn in front of the eye that acts as a camera to record the scene available to the eye.



Software and Algorithms

• A key measure of AR systems is how realistically they integrate augmentations with the real world.

Today Augmented Reality

- Advertising
- **b** Education
- Military
- Health Care

Advertising

• The firms uses AR Tech to attract their customers.

Advertising - IKEA

• https://www.youtube.com/watch?v=vDNzTasuYEw

Advertising - Marshall

https://www.youtube.com/watch?v=-vra4Y8QW9Y

Education

▲ AR Tech makes the school more fun place.

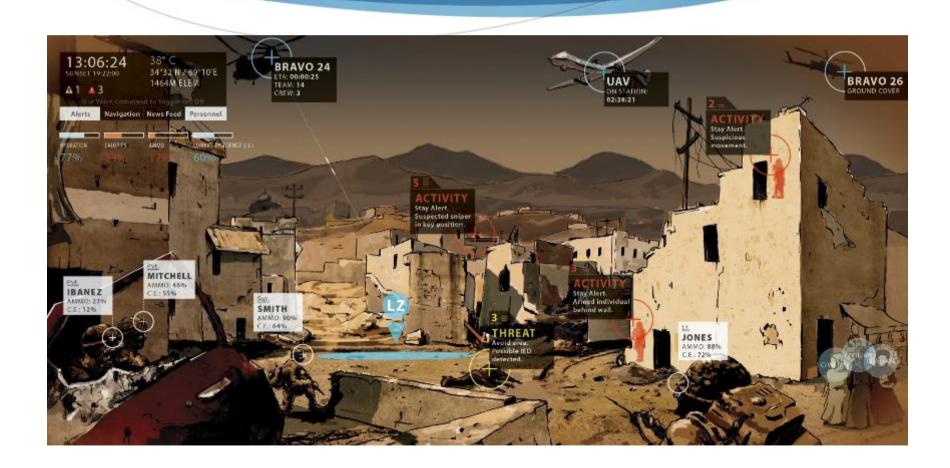
Education

• https://www.youtube.com/watch?v=gTU73_i8AOg

Military

- GIS
- GPS

Military



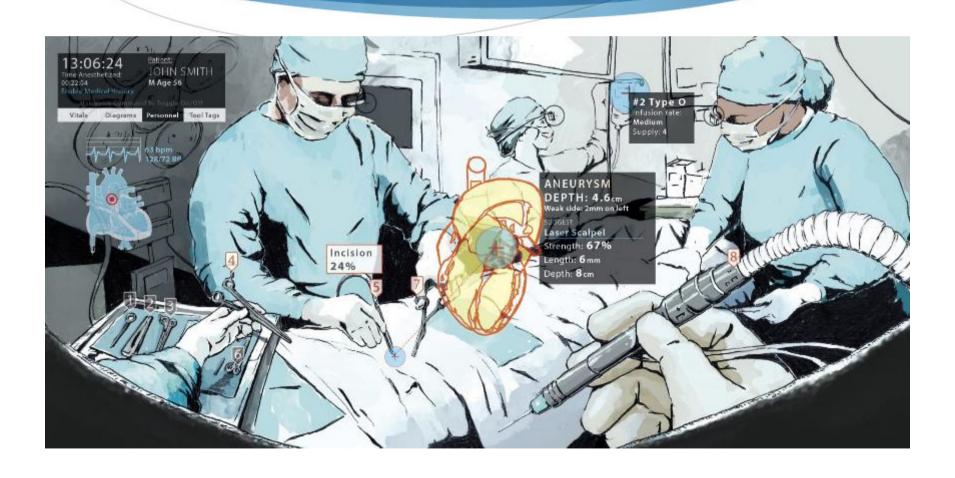
Military



Health

- More effective cure
- Surgeons

Health



Game – Pokemon Go

https://www.youtube.com/watch?v=2sj2iQyBTQs

Game - Ingress

• https://www.youtube.com/watch?v=92rYjlxqypM

Timeline

1901 Frank Baum The Master Key novel 1990 Tom Caudell coins the term.

1968 Ivan Sutherland First HMD

ARTOOLKIT



