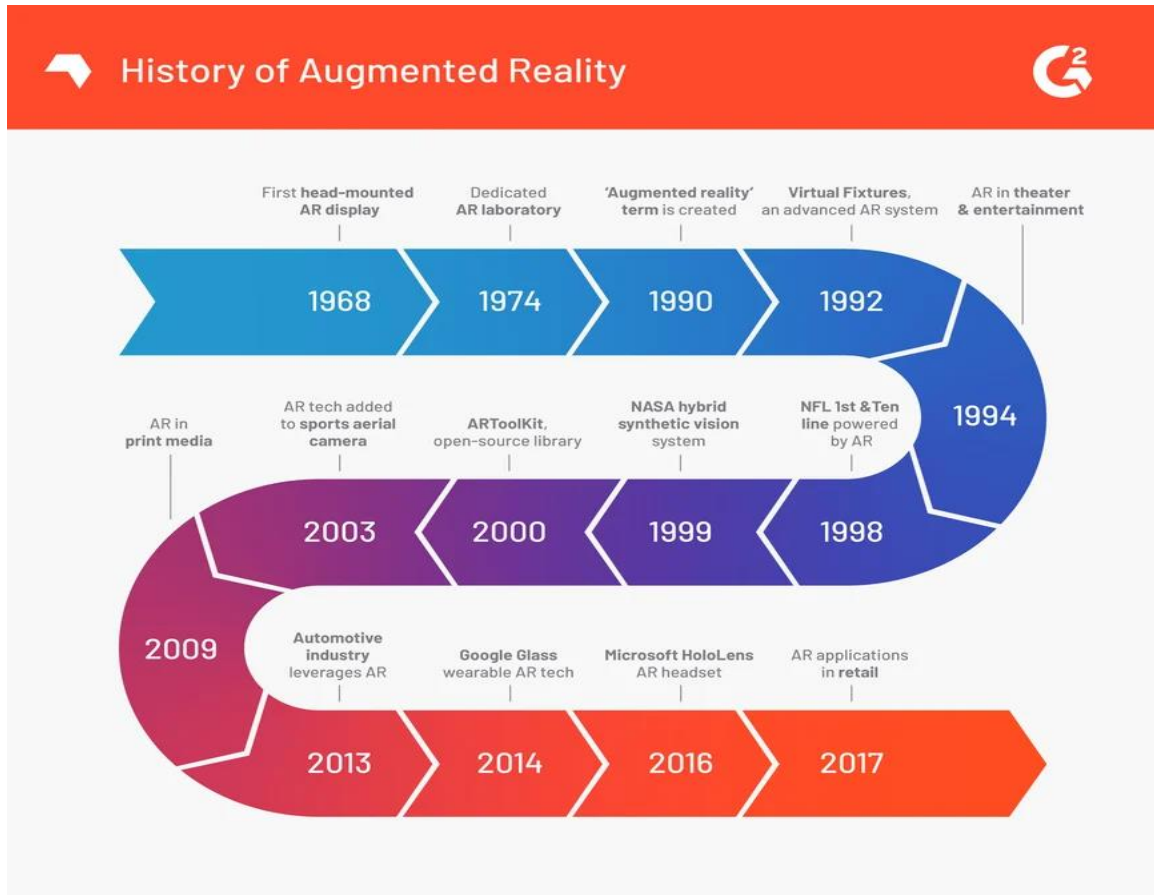


## Defining augmented reality, history of augmented reality



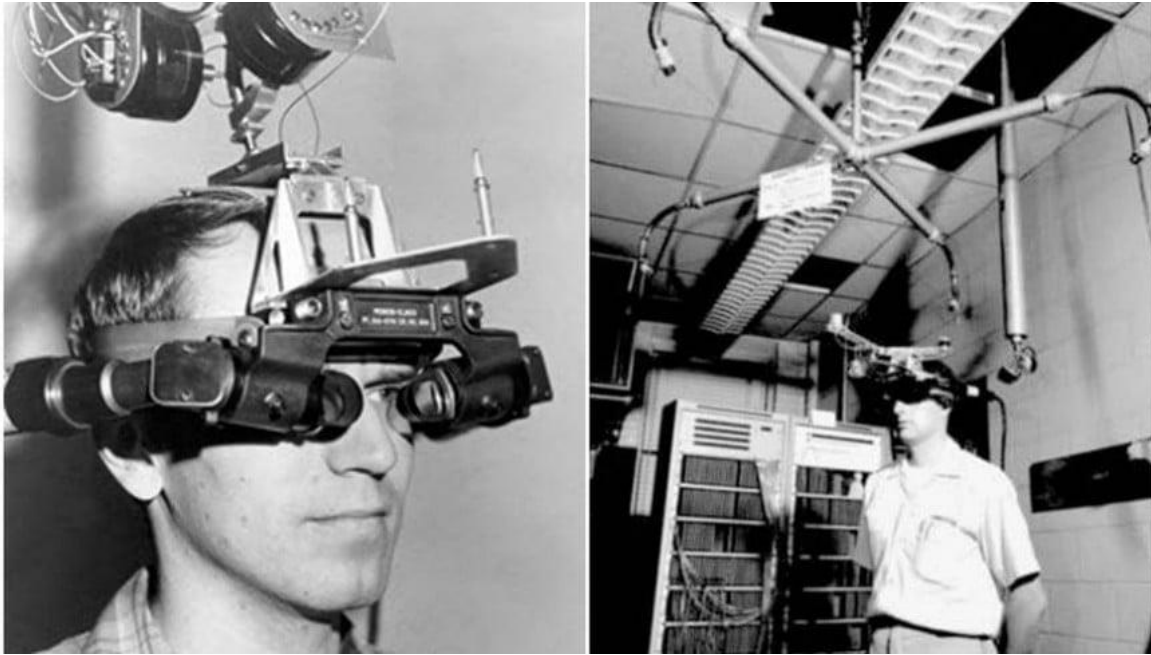
### The history of augmented reality

#### Augmented reality in the 60s & 70s

Let's take a look back to see how AR technology was created in the first place.

**1968:** Ivan Sutherland, a Harvard professor and computer scientist, created the first head-mounted display called 'The Sword of Damocles'.

**1974:** Myron Kruger, a computer researcher and artist, built a laboratory at the University of Connecticut called 'Videoplace' that was entirely dedicated to artificial reality.



### Augmented reality in the 80s & 90s

Now, let's learn how AR transitioned out of the lab and into various industries and business applications.

**1990:** Tom Caudell, a Boeing researcher, coined the term 'augmented reality'.

**1992:** Louis Rosenberg, a researcher in the USAF Armstrong's Research Lab, created 'Virtual Fixtures', which was one of the first fully functional augmented reality systems.



**1994:** Julie Martin, a writer and producer, brought augmented reality to the entertainment industry for the first time with the theatre production titled Dancing in Cyberspace.

**1998:** Sports vision broadcasts the first live NFL game with the virtual 1st & Ten graphic system – aka the yellow yard marker. The technology displays a yellow line overlaid on top of the feed so that viewers can quickly see where the team just advanced to to get a first down.

**1999:** NASA created a hybrid synthetic vision system of their X-38 spacecraft. The system leveraged AR technology to assist in providing better navigation during their test flights.

### **Augmented reality in the 2000s & today**

By now, AR has a foothold in the fast-paced tech landscape. Let's see how it eventually rolled out to everyday consumers.

**2000:** Hirokazu Kato developed an open-source software library called the ARToolKit. This package helps other developers build augmented reality software programs. The library uses video tracking to overlay virtual graphics on top of the real world.

**2003:** Sportvision enhanced the 1st & Ten graphic to include the feature on the new Skycam system – providing viewers with an aerial shot of the field with graphics overlaid on top of it.

**2009:** Esquire Magazine used augmented reality in print media for the first time in an attempt to make the pages come alive.

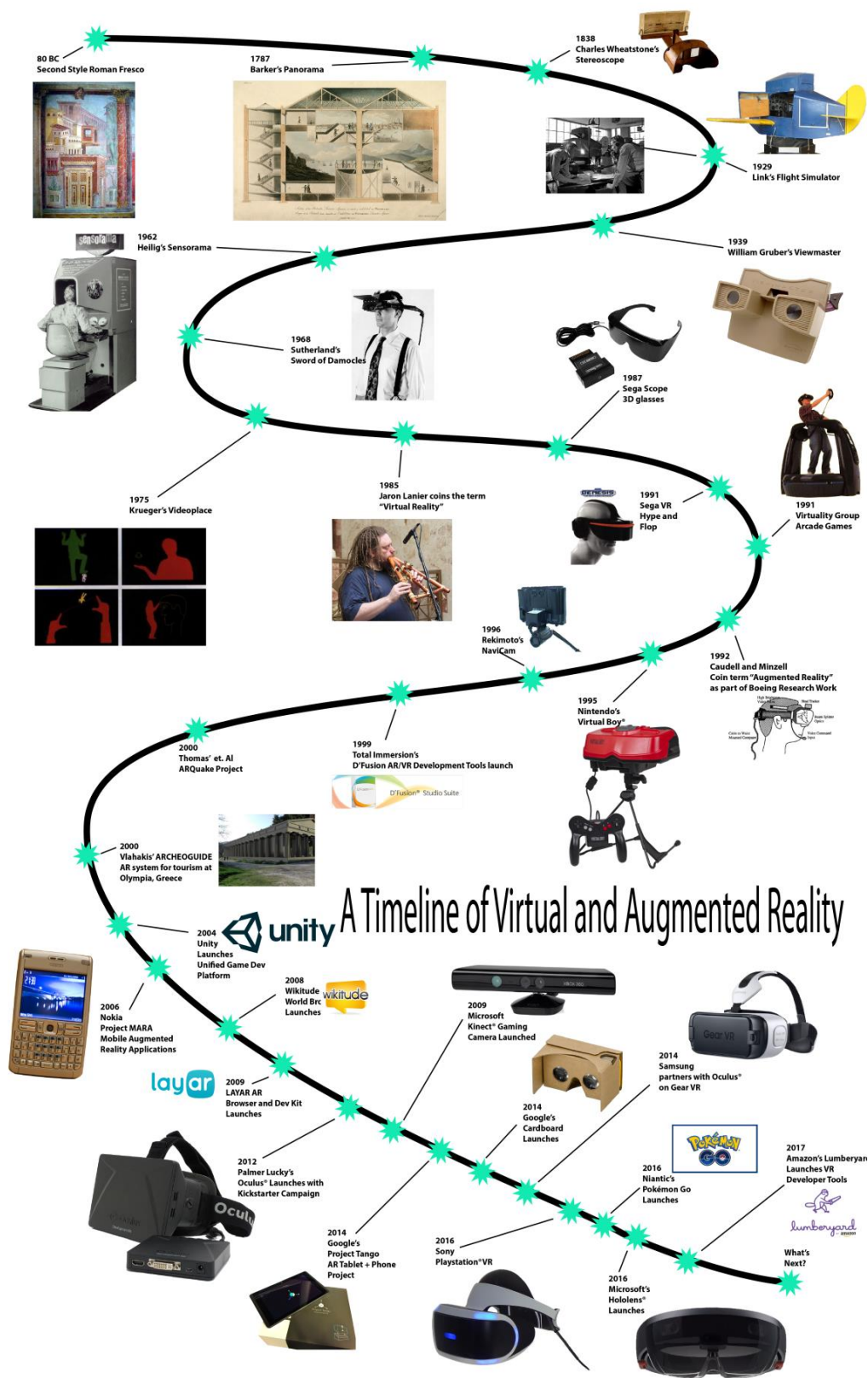
**2013:** Volkswagen debuted the MARTA app (Mobile Augmented Reality Technical Assistance) which primarily gave technicians step-by-step repair instructions within the service manual.

**2014:** Google unveiled its Google Glass devices, a pair of augmented reality glasses that users could wear for immersive experiences.

**2016:** Microsoft starts shipping its version of wearable AR technology called the HoloLens, which is more advanced than the Google Glass, but came with a hefty price tag. It's definitely not an everyday type of accessory.

**2017:** IKEA released its augmented reality app called IKEA Place that changed the retail industry forever.

# TIMELINE FOR AR/VR DEVELOPMENT



## A Timeline of Virtual and Augmented Reality