The History of AR

Augmented Reality was created in 1968 by Ivan Sutherland, an American computer scientist and father of computer graphics from the University of Utah, when he created the *Sword of Damocles*. However, the *Sword of Damocles* could only project wireframe rooms. Myron Kreuger developed his Videoplace in 1974, a virtual reality that contained 25 different environments that people could interact with.

The term “augmented reality” was officially coined in 1990 by Boeing engineer Tom Caudell, with the definition being: “the interaction of superimposed graphics, audio and other sense enhancements over a real-world environment that’s displayed in real-time.” The next step in Augmented Reality was Virtual Fixtures, first designed in 1992 by Louis Rosenberg for the US Air Force. Its purpose was to allow the Air Force to control virtually guided machinery to perform tasks from a remote location. “Dancing in Cyberspace” was an augmented reality theatrical production that was created in 1994 by Julie Martin, and it was the first of its kind.

Augmented Reality made its way into entertainment in 1998 with the creation of the virtual first down yellow line, made possible by the 1st and Ten Line computer system. In 2003, it evolved onto the NFL’s skycam, giving a better aerial view of the virtual yellow line. ARToolKit is an open source AR database that was created in 2000 by Hirokazu Kato, and it is still widely used today.

The next big jump of AR was in 2013 where it began to be marketed to consumers. Volkswagen created the Mobile Augmented Reality Technical Assistant for a virtual step-by-step process of a car’s repairs. Wearable AR was pioneered by Google with the creation of the Google Glass, which displays information in a smartphone-like hands-free format. Wearers communicate with the Internet using voice commands. The latest AR project is Microsoft’s Hololens in 2016.

Augmented reality has a rich history that involves many prototypes and failed take-offs, but these only helped shape it into what it is today. The idea has quickly began to take off with a consumer audience and it is even being incorporated into many fields, such as entertainment, architecture, and science. These innovations have paved the way for other emerging technologies, such as virtual reality. Society is watching as augmented reality becomes incorporated into all areas of life.