

What is Augmented Reality? Everything You Need to Know.

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You've probably already experienced augmented reality (AR) today. It's everywhere. From education to retail to gaming, AR pops up in places you would expect and places you really wouldn't! But what actually is augmented reality?



What is Augmented Reality? Simple Definition

Augmented reality is a technology that overlays digital features onto the real world.

Using a camera and clever tracking technology, augmented reality shows you the real environment with computer-generated elements on top. It's as simple as that!

One of the best ways to explain augmented reality is Pokémon Go. In 2016, Pokémon Go swept the world, with millions of people exploring outdoors to discover and catch new Pokémon.

In the game, your phone tracks your location, the camera films your surroundings, and the app overlays digital Pokémon on top for you to catch. So when you're in the game, it looks like Pokémon are appearing right in front of your feet!

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What's the Difference Between Augmented Reality and Virtual Reality?



The [key difference between AR and VR is how they interact with reality](#). Put simply, AR *adds* to reality, whereas VR *replaces* reality.

In augmented reality, digital features are overlaid onto the real world. In virtual reality, you're immersed in a completely virtual environment with no link to your real world. While they're completely different, both are equally exciting, powerful and useful!

How Does Augmented Reality Work? An Overview of AR Technology

It all starts with a camera-equipped device. This could be a phone, a tablet or an AR/VR headset. You'll use the camera to capture the environment around you. All sounds pretty normal so far, right? This is where the clever technology comes in.

First, an amazing bit of software called computer vision will identify the objects your camera is pointed at. Then, complex technologies like geo-location simultaneous localization and depth



tracking will build a 3D world that reflects your real world – meaning your device now has a 3D view of the space you're in.

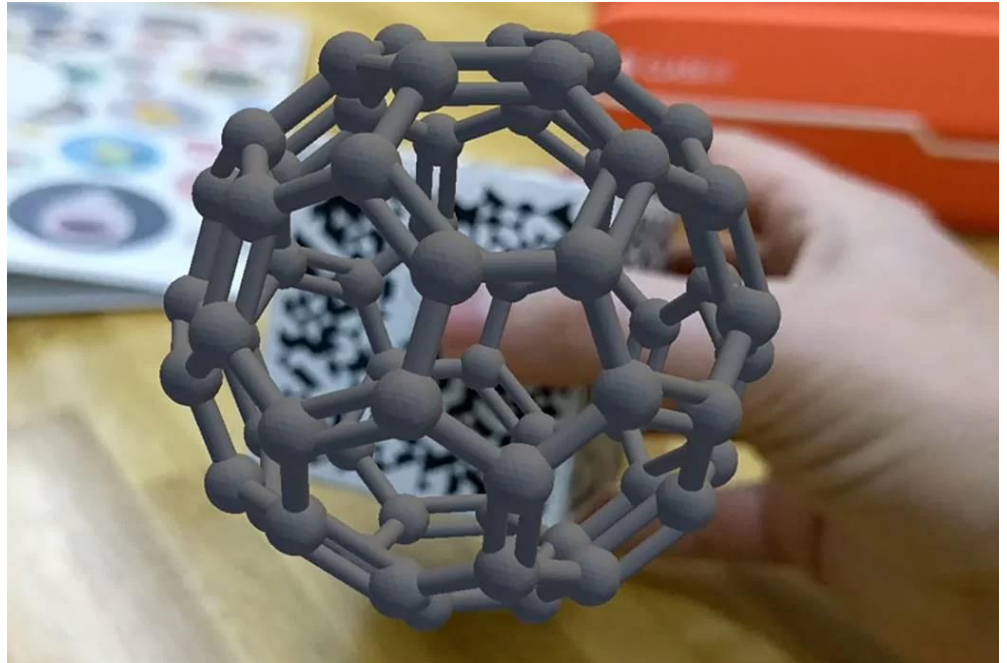


The virtual, augmented elements are then added into this 3D world. When you view the world through your device, whether that's a VR headset, a phone or anything else, you can now see the virtual elements interacting with your real world... just think of the possibilities.

How is it Used? Real Augmented Reality Examples

Augmented reality is everywhere. From face filters on Snapchat to augmenting virtual furniture into your home, AR is used across industries and across the world. Here's a few of the most common examples:

Education: Millions of students around the world are already experiencing AR in the classroom! Using immersive headsets designed for schools like ClassVR, educators are transforming their teaching by implementing AR into their lessons. With AR technology, students can interact with their learning – [boosting engagement, knowledge retention and learning outcomes.](#)



Can you imagine watching a dinosaur appear out of an interactive worksheet, or [holding a human heart in your hands](#)? Using augmented reality in education, it's all possible! Students can hold, examine and explore things that are engaging, impractical and even impossible.

If you're interested in finding out more about ClassVR – the world's most awarded AR and VR solution for schools, [book a demonstration](#) today and experience it for yourself!



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