Did you know?

Virtual Reality (VR) is a type of technology that is completely generated by a computer and allows individuals to interact with a virtual world. This is typically done through the use of a headset.

Augmented Reality (AR) is a type of technology that uses smartphones, computers or other digital devices to place images and layer them into the world around you. An example of AR is the use of filters on Snapchat.

Mixed Reality (MR) is similar to AR, in that you can place digital images into the world around you. However, in MR, the digital elements are able to interact with the physical elements.

Check out this clip from Iron Man that shows use of MR.

Download brochure with links to resources

The Dan T. Moore MakerSpace at CSU

The **MakerSpace at CSU** is a design and innovation lab for use by members of the CSU community that provides equipment for working with plastic, metal and wood. The MakerSpace is also home to VR and AR equipment, including the **VisCube M4**, an immersive virtual reality system.

CWRU Interactive Commons

The **Interactive Commons at Case Western Reserve University (CWRU)** was created as a center to connect individuals from across the campus and local region through advanced visualization to further education and research. The Interactive Commons has many projects in the community that involve the use of VR, AR and MR.

Let's *Explore*

Virtual, Augmented and Mixed Reality

CSU | TECH hub
Working at the intersection of
Technology, Equity, Community + Health

DIGITAL
DRIVEN TO CONNECT

Types of Jobs and Salaries

To get into the VR/AR job field, you should decide if you want a creative/artistic background or technical background (computer science). A bachelor's or associate degree is typically recommended. Types of jobs in the VR/AR field include developers, engineers, designers, or 3D modelers. Learn more.

- XR Developer / $95,000
- Software Developer / $107,000
- AR/VR Maintenance/Support Technicians / $43,000
- XR Designer / $67,000
- Software Engineer / $122,000
- Product Manager / $125,000
- XR Gameplay Engineer / $98,000

Local Employers

CLEVR
Phototonic Studio
XRtistry
Roundtable Learning

Places to look for open jobs:

- Indeed
- LinkedIN
- Meta Careers

VR / AR in Real Life

Places near Cleveland that have VR experiences:

- Zero Latency at Boss VR Arena
- Sandbox VR
- Bill's Crib VR Games (at Perplexity Games)

AR examples:

- AR with Adobe Aero
- Pokemon Go
- Snapchat
- Ikea

Opportunities for Deeper Exploration

CLEVR
Nonprofit organization that hosts meetups, workshops, hackathons, and conferences that promote awareness and education of experiential technologies across Cleveland. Open to anyone with a desire to learn more about the power of AR/VR experiences to improve lives both at play and at work.

Black Rocket Virtual STEM Summer Camps
Summer camps exploring 3D game design, AI, coding, video game design, animation, and more. Maximum age is 14.

AR vs. MR vs. VR

Augmented Reality (AR)
a view of the physical world with an **overlay** of **digital** elements

Mixed Reality (MR)
a view of the physical world with an overlay of **digital** elements where physical and digital elements can **interact**

Virtual Reality (VR)
a **fully-immersive digital** environment

Preparing for the Career
Click on each one to learn more.

Cleveland State University
- Computer Science, bachelor's degree, master's degree
- Data Science, bachelor's degree
- Computer Engineering, bachelor's degree

Cuyahoga Community College
- Computer Integrated Manufacturing (CIM), Certificate of Proficiency
- 3D Digital Design and Additive Manufacturing Technology, Certificate of Proficiency
- Digital Design and Product Innovation

Case Western Reserve University
- Electrical Engineering, bachelor's and master's degrees
- Computer Science, bachelor's and master's degrees