

Virtual Biomedical and STEM/STEAM Education

2021-1-HU01-KA220-HED-000032251





Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.











Shapes XR

Extended Reality in healthcare and medical education







>>> What is Shapes XR?

- 3D design and modelling platform
- Drawing in 3D simple and easy way to bring your ideas to life
- View and interact with models as if they were part of your room/office
- Export directly to game engines and other modelling software
- Work together with or present to others



>>> Your creations come to life





Developed by Meta

- Available on:
 - Quest 2, 3
 - Meta Quest Pro
 - Pico 4

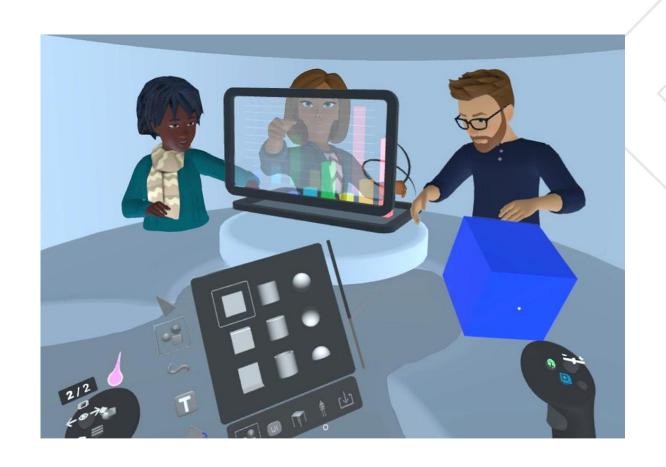






>>> Collaboration

- One of the main design focuses
- Easy and quick connection to others
- Real-time interaction
- Design and test together
- Controlled presentation mode

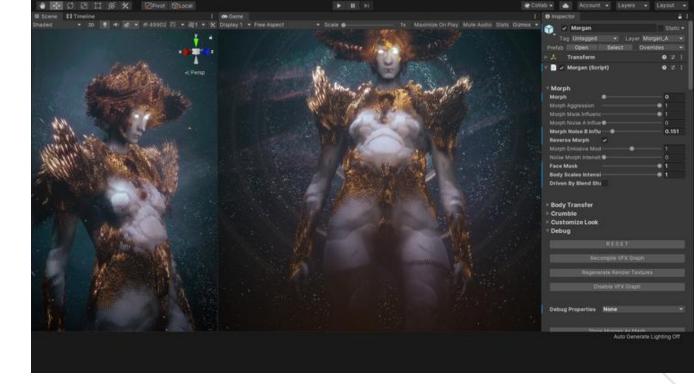


>>> Collaboration





- Real-time development platform
- Game engine
- Free to use for students and hobby developers
- Custom plans available for professional use
- Developed and maintained by Unity Technologies
- Supports creating in 2D, 3D and VR/AR
- Build games for Windows, Linux, Andriod macOS, iOS



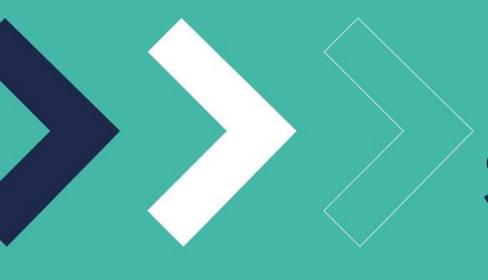


>>> Shapes XR Plugin

- Allows you to import your models to Unity
- Supported file formats:
 - GLB
 - glTF
- Edit your models as any other object in Unity
- Add interactions, scripts, particle systems, etc.

>>> Using the plugin

- Download the plugin package
- Create a new 3D project in Unity
- Import TextMeshPro Essentials
- From the Assets menu import the ShapesXR Unity Integration as a custom package
- To import your space you have to open the importer window by going to ShapesXR -> Importer
- You can import your space by inputting the 8 character access code in the importer



Shapes XR - CAE

Immersive experiences for the healthcare industry

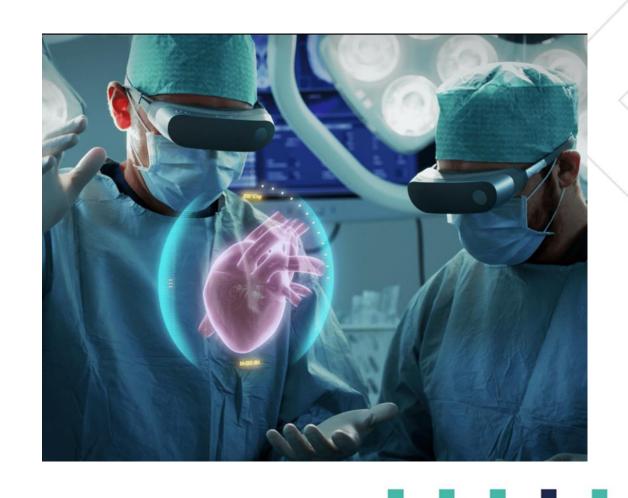
>>> CAE Inc.

- Canadian Aviation Electronics (former)
- Industry leader in simulation based healthcare technologies
- Simulation and modelling software and hardware for
 - Airlines and aircraft manufacturers
 - Defence industries
 - Healthcare



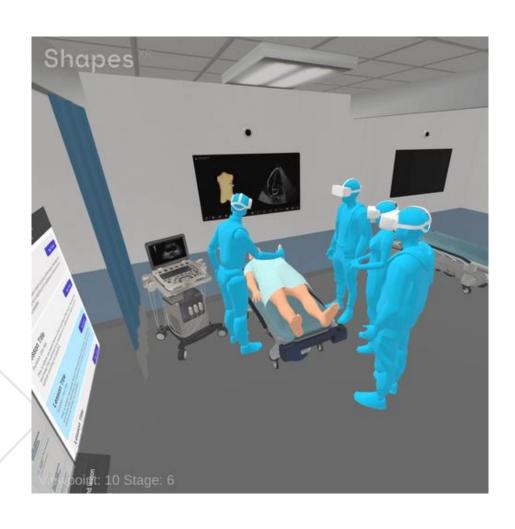
>>> The future of healthcare education?

- Immersive, interactive environment
- Learn by experience
- View from any angle
- Low cost
- Working together, realtime, but risk free



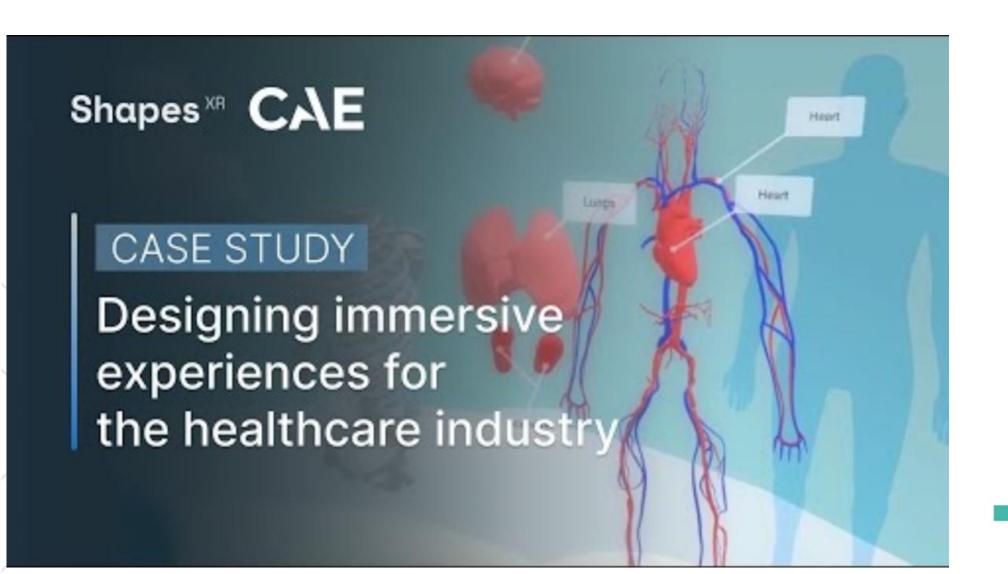


>>> Education and healthcare



- Simulators for students and industry professionals
- Planning and practicing
- Testing, correcting ideas and methods
- No practice material or "real" patient needed

>>> Shapes XR - CAE



>>> Sources

Shapes XR website

CAE Hungary website

Wikipedia – CAE Inc.

Youtube – ShapesXR

Unity.com

All images and media files used in the presentation are from the websites listed above, my own screenshots, or stock images available for free

JIES PROJECT



vibe-project.pte.hu