What Can We Expect from Hologram Technology in the Future?

Dr.Balika . J. Chelliah Dr.A.Senthilselvi
Associate professor, Department of CSE, SRM IST Ramapuram

As technology continues to progress, we are given the opportunity to explore new and more exotic types of programming, software, hardware, and systems. One innovation that is growing at a rapid pace is hologram technology.

What Exactly Are Holograms?

Holography is a photographic technique that records the light scattered from an object, and then presents it as three-dimensional.

How Do Holograms Work?

To make a hologram, you record an object (or person) in a clean environment with a laser beam and apply the information to a recording medium that will clean up and clarify the image.

What Are 3D Holograms?

3D holograms are coming into our lives. A 3D hologram is an object that isn't actually "there," but looks like it is, either floating in mid-air or standing on a nearby surface. This "augmented reality" (AR) is a revolution well on its way.

Medical Holography

A new technology called the Holoscope can ingest medical images of a patient's heart and display a three-dimensional holographic image of that heart. It allows the surgeon to not only see the heart directly in 3D, but to explore, rotate, and slice the hologram in real time.

Application

- X-ray holography can be applied for imaging of internal parts of the body and living biological specimens with very high resolution without the need for sample preparation.
- Endoscopic holography has opened up the possibility of noncontact high resolution 3D imaging and nondestructive measurements inside the natural cavities of internal organs.
- Three dimensional images of biological specimens can be synthesized from a series of two dimensional radiological images using the techniques of holographic stereogram, holographic conical stereogram and multiplex hologram.
- Holographic contour generation is useful for measurements for biomedical specimen.