

Use Case

MRI scans in Hospitals and Liquid Galaxy



* We are going to ideate use case of Liquid Galaxy in Hospitals and MRI scan.

About Liquid Galaxy:-

The Liquid Galaxy is an open source project founded by Google. Created in 2008 by Google employee Jason Holt, the Liquid Galaxy started as a panoramic, multi-display viewing that gives the ability to view panoramic video, photos and much more.

- The Liquid Galaxy can play panoramic photos and videos that stretch beyond viewers' peripheral vision, totally surrounding them in another place.

- For more information of Liquid Galaxy, click on the following link :-

https://en.wikipedia.org/wiki/Liquid_Galaxy

About Hospitals and MRI SCAN:-

Magnetic resonance imaging is a medical imaging technique used in radiology to form pictures of the anatomy and the physiological processes of the body in both health and disease. MRI scanners use strong magnetic fields, radio waves, and field gradients to generate images of the organs in the body. MRI does not involve x-rays, which distinguishes it from CT or CAT scans. Magnetic resonance imaging is a form of nuclear magnetic resonance (NMR). NMR can also be used for imaging in other NMR applications such as NMR spectroscopy. While the hazards of x-rays are now

well-controlled in most medical contexts, MRI still may be seen as superior to CT in this regard. MRI is widely used in hospitals and clinics for medical diagnosis, staging of disease and follow-up without exposing the body to ionizing radiation. MRI often may yield different diagnostic information compared with CT. There may be risks and discomfort associated with MRI scans. Compared with CT scans, MRI scans typically take longer and are louder, and they usually require that the subject enter a narrow, confining tube. In addition, people with some medical implants or other non-removable metal inside the body may be unable to undergo an MRI examination safely.

For more information about MRI, click on the following link:-

https://en.wikipedia.org/wiki/Magnetic_resonance_imaging

- The following are the use cases of Liquid galaxy in MRI Scan in Hospital.

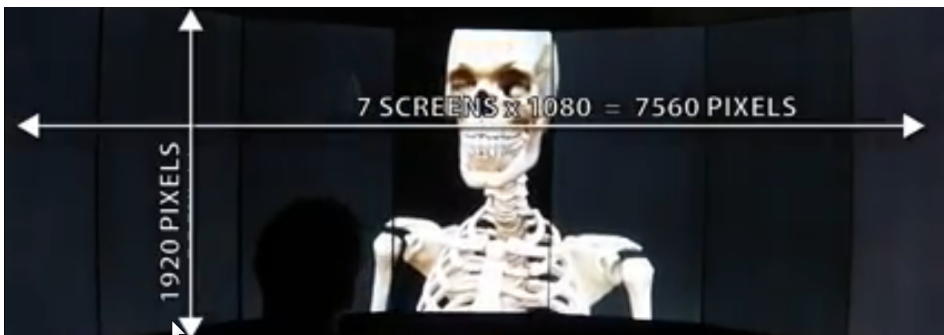
-- This new and impressive technology can be used in many ways.

- 1) Liquid Galaxy can be used by the doctors to examine the MRI scans in 3D. Doctors can discuss more accurate information about the MRI scans.
- 2) Liquid GaLaxy can be used by the doctors in zoom view of the MRI scans in 3D for the giving of accurate information.
- 3) Doctors can examine multiple MRI scans simultaneously in 3D with the help of Liquid galaxy.

4) Teams of doctor can examine the same MRI scan from different parts of the world as the Liquid Galaxy is already installed there, with the help of internet (type of video conferencing, as Liquid galaxy's monitor is used as display and speaker of liquid galaxy is used for communication). (if required)

5) Liquid Galaxy can be used to view skeleton in hospitals.

LG can be used by doctors to view someone's 3D skeleton to discuss where the actual part of fracture in the body. It is also can be used by the doctors to show skeleton and explain it to their students that are on training in hospitals.

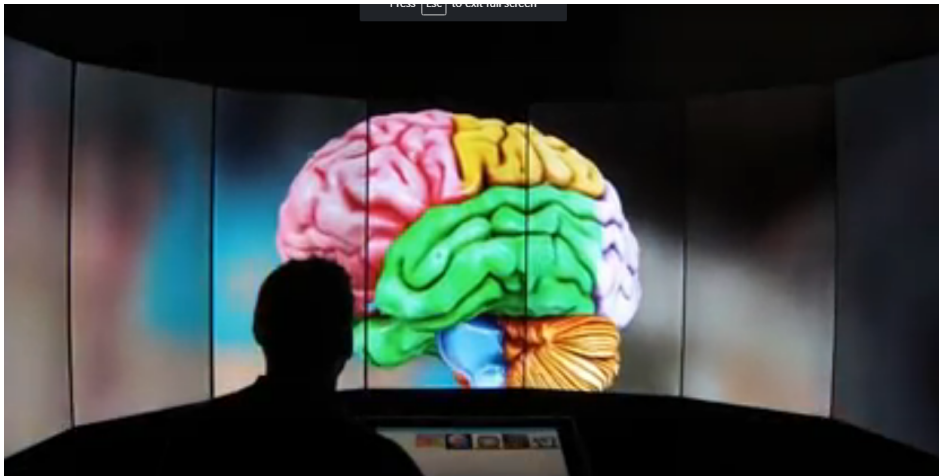


(internet is source of photo, In this picture someone is viewing skeleton on LG)

6) Liquid Galaxy can be used to view 3D complex parts of body.

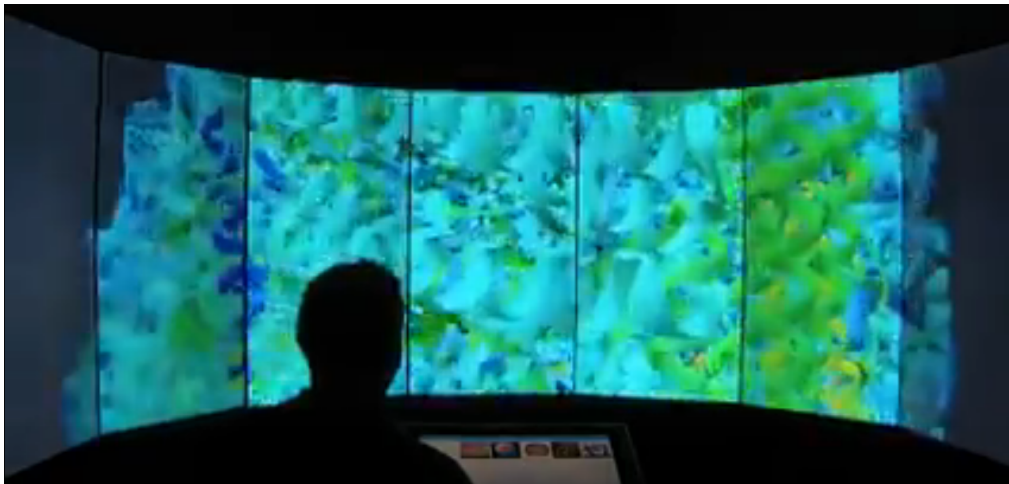
LG can be used by the doctors to examine complex part of body. Example, someone got serious brain damage, so doctors do his scan of brain and view it in LG so doctors get the exact location of damage.

This also can be used to teach medical trainee students about the brain.



(the following is examine the brain the LG, Internet is the source of picture.)

7) Doctors can zoom as much as they want to teach or to examine the body parts and their functions.



He is examining the neuron by zooming it.

Q. Why the Liquid Galaxy can be used in this area?

There is no such technology present in hospital for doctors to examine the MRI scans in 3D, Multiple MRI scans.

Liquid Galaxy helps the world of hospitals to be connected and discuss serious cases and scans together.

3D Visualization of Medical Models on Liquid Galaxy :-

<https://www.youtube.com/watch?v=FP16vfXOool>

Thanks

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