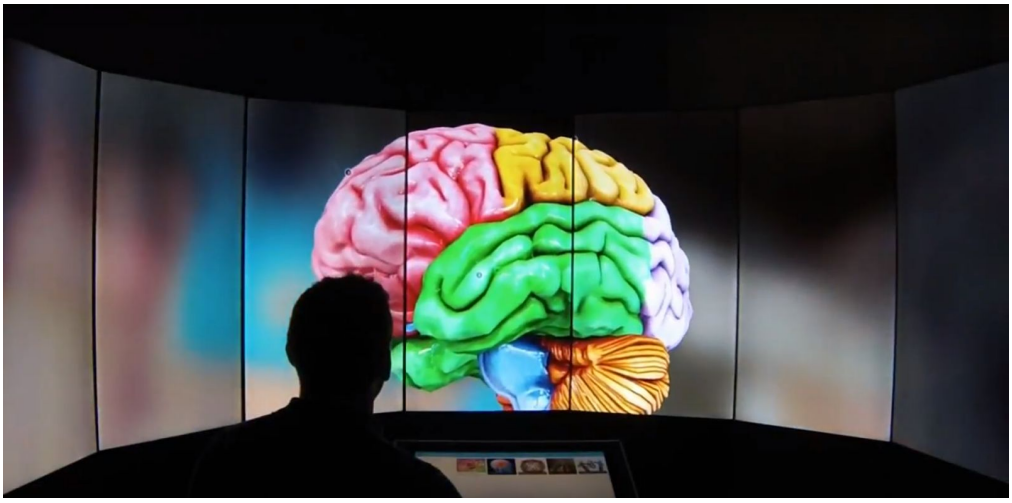
Google Code-In 2017-2018

Liquid Galaxy Use Case For Hospitals

December 21, 2017

Technology is always changing, evolving. It's no mystery that display technology has also been improving. From 720p to 1080p to 2K to ultra HD to 4K to 5K and lastly 8K. However, as that is extremely amazing, but that's the internals. The actual hardware is in plain, a single rectangular piece of plastic with some glass on it. There has not been any significant upgrade to its design… until now. Google's Liquid Galaxy panoramic multi-display, originally for Google Earth, but now has evolved to become a general data visualization tool for operations, marketing, and research. With Liquid Galaxy's innovative charm, its potential is infinite. One such use case is with Hospitals. Liquid Galaxy will revolutionize hospitals and the medical field, by educating future doctors, understanding and learn more from MRI scans and aid research of new cures, and procedures.

Becoming a doctor, nurse or medical researcher is no easy accomplishment. It takes years of practice and determination. They have to imagine and understand how the body works. This is made easier with diagrams of the



human body. However, they never could really interact with said diagrams, as they are two dimensional. Due to this, they have to spend more time, envisioning and thinking about how the body works. It would be fantastic if there could be a way for them to actually be able to interact with the diagrams. With the implementation of Liquid Galaxy, that dream can become a reality. As seen in the image above, Liquid Galaxy shows sharp and accurate displays of the brain. The viewer could now interact with this display by using a joystick. When the viewer learned about the brain, they could easily change to another body part, with Liquid Galaxy's simple to use interface. With the help of Liquid Galaxy, future medical leaders could learn more in a faster amount of time, which in turn with benefit the medical community as a whole.

MRI scanners are extremely tricky, essentially their like cryptic machines. MRI is a type of medical image technique used in radiology to form pictures of the body and the living processes of the body in both health and disease. It takes people with years of knowledge to learn how to decode these machines.

In plain, This is mainly because, they have to look for fine details, like looking for a needle in a haystack. This takes times, usually hours just to do the one scanning. With Liquid Galaxy, MRI scans would become easier to decode. With Liquid Galaxy, they could no see enlarged more detailed results and dive into the scan. Using the joystick, they can now navigate around the scanners seeing every little detail. Due to the size of Liquid Galaxy, entire teams could work together, in one place and work together to decode this information. With Liquid Galaxy, the complexity of decoding MRI results can become a thing of the past.

The Medical World would be nothing without the minds behind the computer. Researchers work day and night to invent a new antibiotic or a cure for some disease. They are the backbone of medicine. It is no secret that this is extremely hard to do. They spend lots of time researching, reading papers on some foreign medicine, and experimenting. Computers software extremely aid them in unraveling the mysteries of life. However plain software or hardware could never truly immerse people in their work. With Liquid Galaxy, researchers would be able to be truly immersed in their work. They could truly understand how the body works. Liquid Galaxy is also an incredibly big, space and workstation. And would truly maximize their working potential.

In conclusion, Liquid Galaxy will revalutionize the medical world. It will do this, by educating the future medical leaders understanding and learning more from MRI scans and aid research of new cures, and procedures.