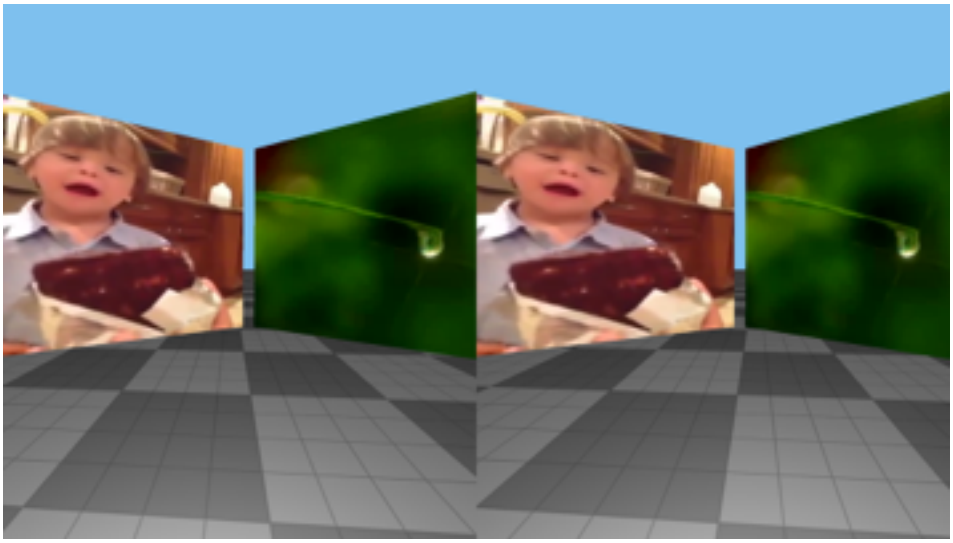
Room

— New Way to Work Efficiently



Motivation:

When using computers, we usually open many windows to browse and work at the same time. It is tiring to manage so many windows, and we have to keep switching between them because the monitors we use are always not big enough. Now we don't need to suffer from it anymore. With our new operating interface product Room, you will get rid of the computer desktop and enjoy the brand new experience.

Our product:

We combine the Intel Edison Board and VR Glasses to build a virtual 3D operating interface. VR Glasses is the combination of VR headset and mobile device. When wearing VR Glasses, you can see the virtual world displayed by the mobile device set in the headset.

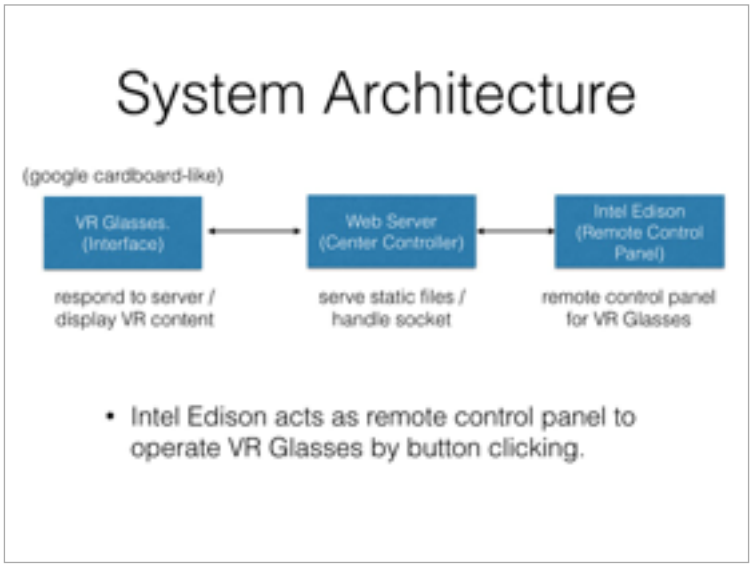
In our product, the virtual world is the interface. You can see many windows on the air. Then you can use the remote control panel, which is built by the Edison board, to control the window like the mouse. In the virtual world, all you can see is your workspace. No need to switch windows cause you can just drag them to wherever you want. Many windows on the air which wouldn't overlap help you browse the window more conveniently and efficiently.

Our innovation:

Using the Intel Edison Board gives us some advantages when dealing with VR related projects. First, the remote panel built by Edison gives us the solution to deal with the hard control of VR Glasses. It is hard for a man to operate what he sees just by shaking his head. Next, the internet feature of the board can share the data with the glasses. Therefore, we can do more complex operation on the glasses

The technique we use:

We use Node.js to build a web server as the controller of our product. The mobile device set in the VR headset uses browser to render the VR interfaces. No need to install any app on the mobile device. Then we use the Grove Starter Kit for Arduino and Intel Edison to build the control panel. We use a button and a touch sensor as the input of the control panel. The control panel can send http request to the web server. Then the server is able to send message to the browser via socket and modify the content of the interface.



The market feasibility:

Compared to other similar VR product (like Oculus Rift), our product is very low-cost. Thus our product is more competitive than others.

Since our product creates the new way to interact with the technology, we believe the product can be the trend in the future.