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DEPARTMENT OF COMPUTER SCIENCE

WHOOSH DIVISION

OcuViz - EpiUse Labs

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1 Introduction

When presented with fairly large or small numbers we as human beings tend to struggle. One struggles to grasp the sheer magnitude of how much a trillion dollars is for example or the distance light travels in a second.

The aim of OcuViz is to create a platform for the visualization of data in 3D space using virtual reality to provide an immersive and presence depth.

2 General Information

2.1 System Overview

2.2 Description

OcuViz is a platform for the visualisation of data in a virtual 3D space to allow users to conceptualise large numbers more accurately and naturally. Leveraging the power of VR we are able to create awe-inspiring and immersive scenes for users to experience. As well as, allowing users to create their own scenes through either modular CSV files which are interpreted into 3D scenes or a simplified editor without requiring the user having to be a graphics experts.

2.2.1 System Configuration

Minimum hardware requirements to run OcuViz

- VR Headset: Oculus Rift DK2

- GPU: GTX 970 or AMD R9 290

- CPU: Intel Core i5-4590

- RAM: 8GB

- USB: 2 USB 3.0 ports

- OS: Windows 7 SP1

2.2.2 Installation

OcuViz Prerequisite

- Oculus Rift Runtime Setup - https://www3.oculus.com/en-us/setup/

OcuViz will be provide in both portable and installer formats. To install simply unzip the files (portable format) or follow in the installation instructions.

3 Getting Started

OcuViz is straight forward to use. Ensure your Oculus Rift Headset, controller and head tracker are plugged in. Then launch Oculus Store. Ensure that your headset is showing a blue light. If not check Oculus Store to see the issues that exist. Also accept the health warning message displayed by the h Finally simply run OcuViz.exe to use the software. No login is required and would not make sense for this system.

Launching OcuViz

OcuViz aims to be a user friendly experience. To start using OcuViz is a straight forward procedure.

1. Ensure Oculus Rift headset, head tracker and controller (or keyboard and mouse) is plugged in.

2. Launch Oculus Rift Runtime.

3. Check that Oculus Rift headset is showing a blue light.

4. Accept the health warning message if one is displayed on the headset.

5. Run OcuViz.exe

4 Using the system

5 Troubleshooting

Headset is not displaying an image
Firstly ensure that the headset is showing a blue light. If an orange light is being displayed, exit OcuViz. Restart Oculus Rift Runtime and relaunch OcuViz.