



## 360 panorama in VR glasses

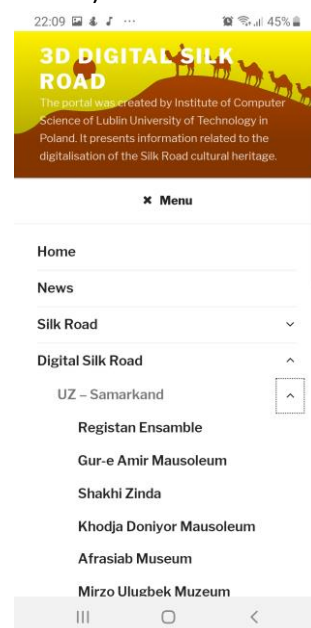
Instruction of how to download and watch the 360 panorama images provided by silkroad3d.com, using VR glasses and an Android operated phone.

### A. Downloading 360 panorama images

1. Open the 3D Digital Silk Road site (silkroad3d.com) using the browser in your mobile device.

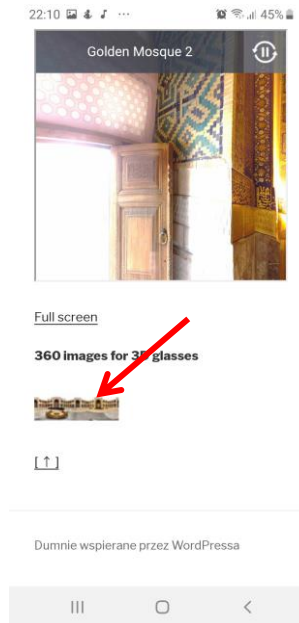


2. Navigate to the object you want to see in Virtual Reality panorama (e.g. Digital Silk Road -> UZ-Samarkand -> Registan Ensemble)

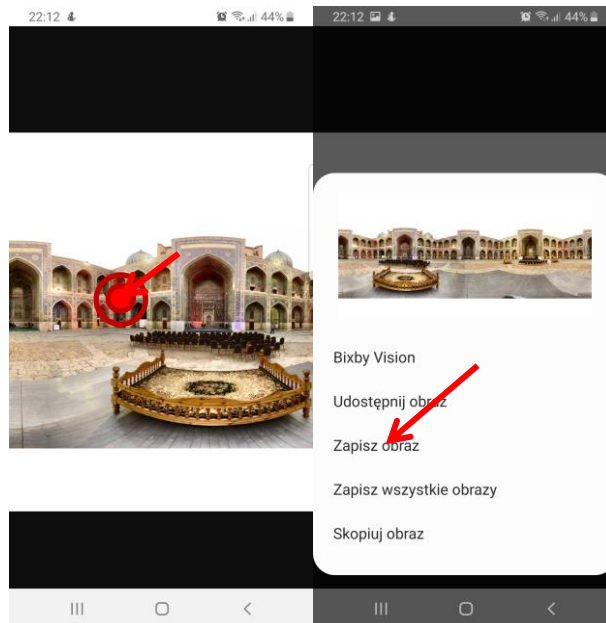




3. Scroll down to the part titled "360 images for 3D glasses". Tap on the desired image miniature and wait until the image loads (may take some time as the images are large).



4. Tap and hold on the displayed image until a menu shows up. Select an option to download/save the image. The image gets saved in the download folder of your mobile device



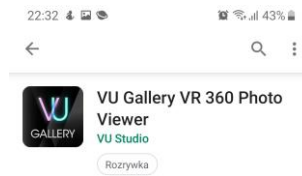
5. In the same way download any other panoramas you wish to see.



B. Installing Viewer application

If you already have a 360 panorama viewing application installed, you may skip this section.

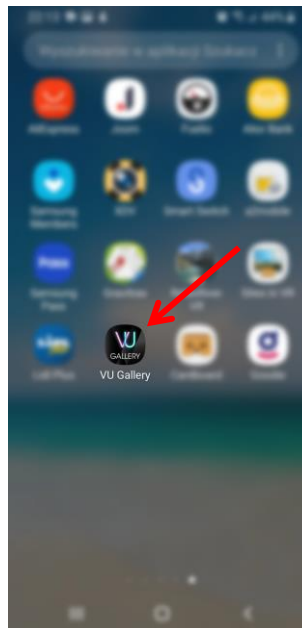
1. Use Google Play Store to download a panorama viewing app. There are plenty of apps available. We will use as an example the VU Gallery VR 360 Photo Viewer.
2. Find the VU Gallery VR 360 Photo Viewer in Google Play store and install it.



C. Viewing panoramas

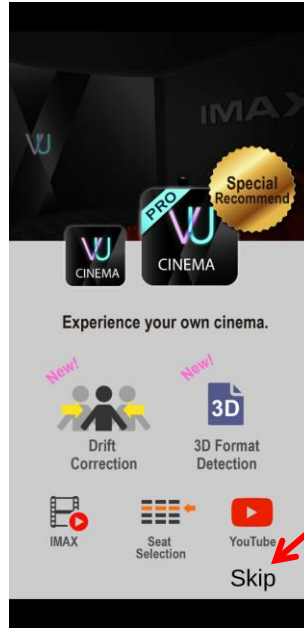
Different viewers have different methods to operate. We'll present the way to view panoramas on the example of the VU Gallery VR 360 Photo Viewer.

1. Run the VU Gallery app

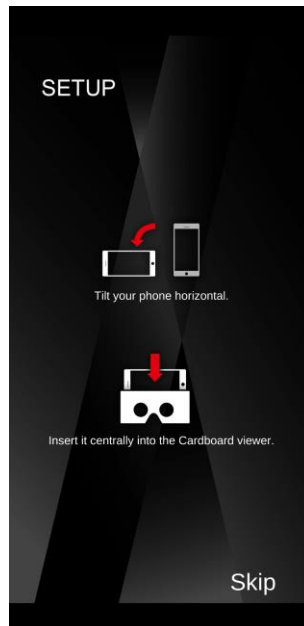




2. You will be first presented with screen describing the pro version of the app, just skip it.

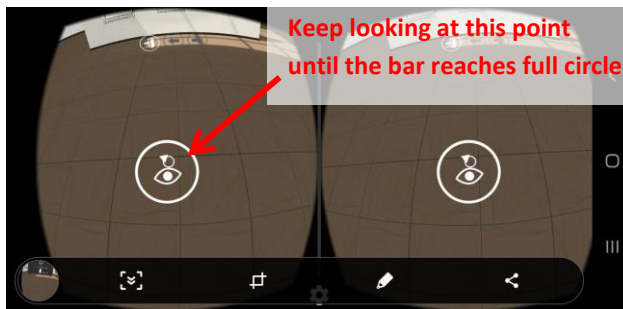
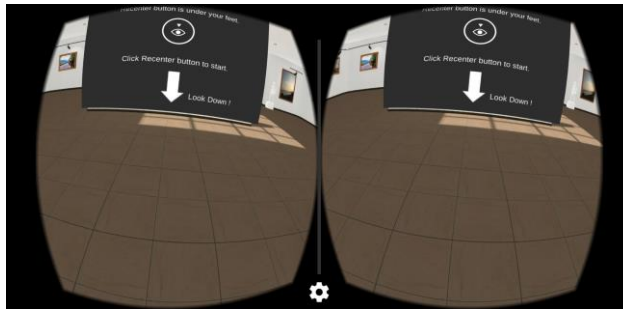


3. Secondary you will be asked to place the phone horizontally and insert it into VR goggles. Follow the instructions to place your phone into VR goggles





4. Once the phone is inserted put the goggles on. You will be asked to calibrate your position by looking down on special spot. Just look down and place the targeting point on the marker. Keep it there until the bar makes the full circle. Such a method of interacting with VR application is called gaze navigation and will be used throughout the application.



5. Look in front of you. You should see a screen in a virtual room. On the screen there are several images representing typical places where images are stored in the mobile app. Among them is a "download" folder. Select it by looking on it.

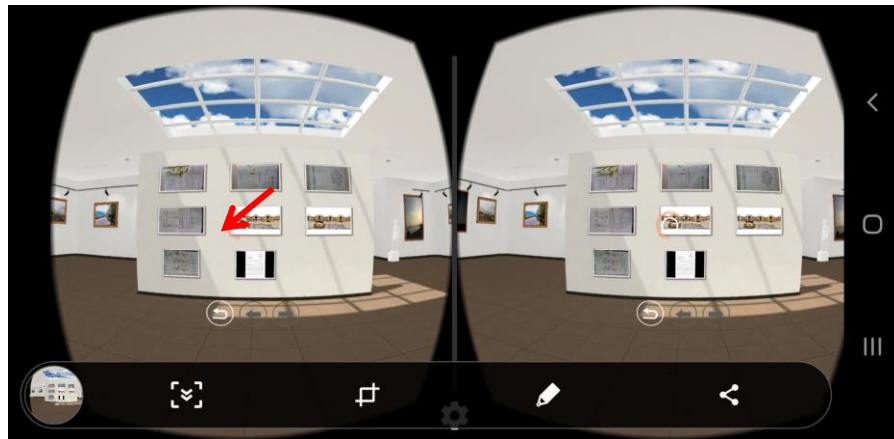




6. You will see the image content of this folder. The downloaded panorama images should be displayed here.



7. Select one of panorama images by looking on it.



8.

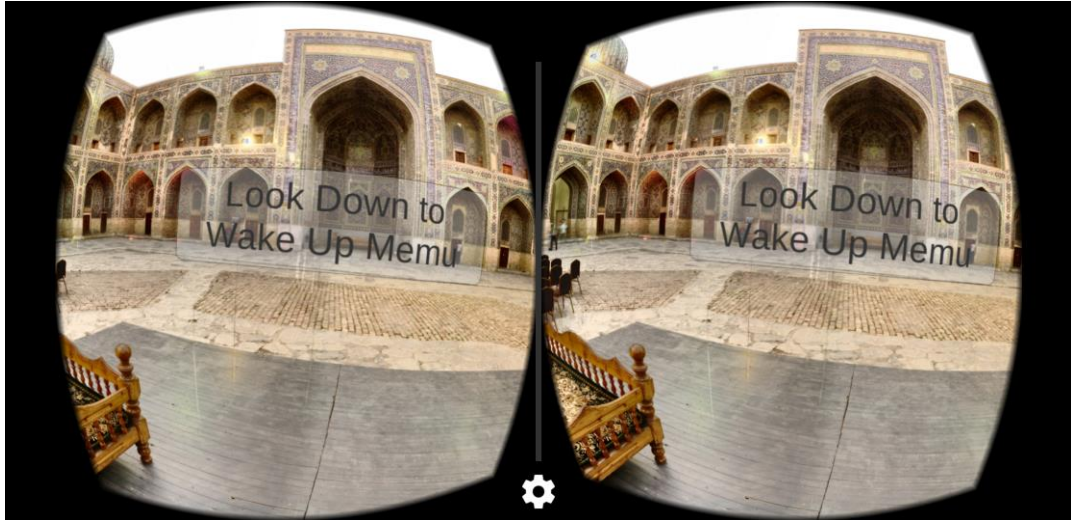
9. The image will be displayed on the screen. If you look below the screen you will see a menu. The last option to the right is a 360 panorama mode. Select it.



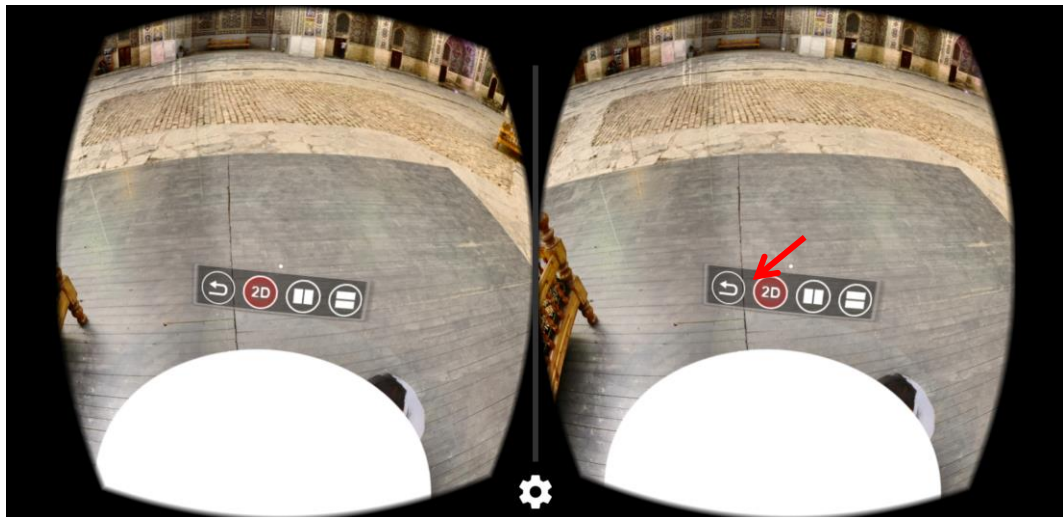




10. You are now watching the 360 panorama. You may turn your head freely to see the place around yourself.



11. Once you wish to stop viewing the panorama, look down. A menu appears with a “back” button. Select it to go back to screen display.



12. You may now go back and select another panorama image or keep going back until selecting “exit” to close the viewer.