Three-dimensional immersive photo viewer

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Introduction: The goal of this project is to explore the world of a panoramic photo in VR without the use of controller. I work together with Jean-Baptiste in this project to create an immersive photo viewer.

Abstract: The kind of application which let you explore a world or have a 360° experience with a photo already exist. The difference with this project and the past application is the existence of a story for each world and hand-free.

Content: The purpose of this project is to dive into the world of an immersive photo(P1). In the world, there is a story which will let you understand the world. By following the story, you will see different album with a short description for each photo and, step by step, explore your surroundings(P2). The interface can be manipulated via your headset and without the use of controller.



Picture 1: Immersive photo



Picture 2: photo album

Technology & **system**: For our project, we used Unity 3D with Oculus Rift headset to make the simulation. As hand-free is the selling point, we use the pointer of the center eye of Oculus Rift to manipulate the interface. When the Gaze Pointer is on an interactable object, a timer of 2 seconds will start and activate the function of the object. There is also a function to load the photo from Google Drive or a local folder.

Conclusion: The project is mostly finished and greatly surpass what I imagined at the beginning of the project. It is a shame that I can not do my internship in Japan but I am grateful for Idehara sensei who allow us to continue the internship at home.