

# VR LIBRARY TOUR

The NIE Library Experience

## VIRTUAL REALITY

Virtual reality (VR) provides a computer generated 3D environment that surrounds a user and responds to that individual's actions in a natural way (Gartner, 2012). Leveraging on the accessibility of VR technology solutions, the National Institute of Education Library (NIE Library) experimented with 360-degree digital camera and VR software tools to create a VR library tour to give library users and the public a glimpse of the library facilities and resources right in front of their eyes without stepping into the library.

While NIE Library has been providing an overview of the Library facilities and resources through the Library website, users may merely be getting snapshots of the Library through images and textual descriptions of Library facilities and resources. To excite library users in getting to know the library better, the NIE Library explored the use of VR solutions with the objective of providing an immersive VR library tour experience for library users.

## TOOLS



A camera is an essential tool for a VR tour project, as 360 degrees photos are the foundation to build a virtual space that simulates the reality. A camera with a function that shoots everything in 360 degrees in a single shot will be the best option to reduce time consume in photo stitching.



The second phase of a virtual tour creation is to create an interactive guided tour via software or online platform, where scenes of different location are linked, and information such as images, audio and word description of an object is popping up upon a click.

## METHOD

Step 1:  
Prepare numerous 360 degree photo (photo-sphere) of different spaces via camera with the ability to capture 360 degree photo.



Step 2:

On each individual 360 degree photo, add on interactive icons and link it to another scene, webpage, video or audio via software.



## FUTURE WORK

Argumentative Reality technology will be used in conjunction with the Virtual Reality technology to engage and inform library patrons of library latest technology and resources available through the full dynamic experience of the integrated virtual and real world, both within and outside of library boundaries. In the same time, promote to educators the use of argumentative reality and virtual reality technology to help students visualise and conceptualise abstract concepts and theories, especially for science subjects.

“Open” up the inaccessible area in the library with the use of Virtual Reality Technology to give public a glimpse of library archive resources and artefacts. Library protects and preserves precious materials for future generation by keeping it in the closed stacks, where the public are unable to access to all these rare materials. With the VR technology, the library can digitalise and grant entry to these materials in a virtual world. Hence, achieving the aims of sharing information with current and future generation.



An Institute of



Name: Mr Douglas Lau  
Company: National Institute of Education  
Country: Singapore  
Email: douglas.lau@nie.edu.sg



Name: Mr Jacky Wong  
Company: National Institute of Education  
Country: Singapore  
Email: kaepeng.wong@nie.edu.sg



Name: Ms Sandie Loo  
Company: National Institute of Education  
Country: Singapore  
Email: sandie.loo@nie.edu.sg