

Emerging Technology

360° CAMERA AT CARLETON UNIVERSITY LIBRARY

Ryan Tucci, Library Reserves Technician, Carleton University Library



Why 360°?

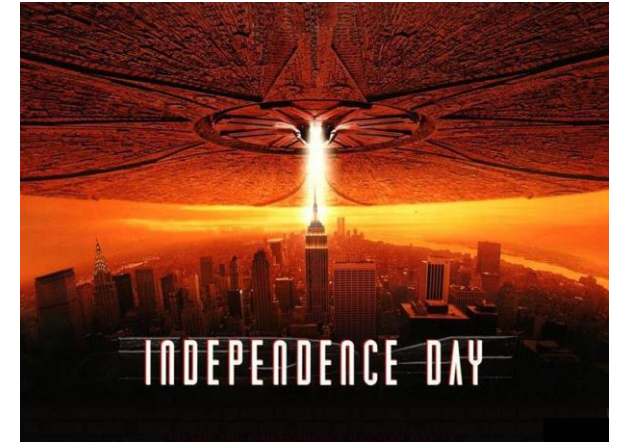
Comparing real space vs digital versions of the space



How do we fit this into the library?



Initial research brought me to this, the mothership of all cameras



16 GoPros total cost: approximately \$8000 USD

\$10,967.60 CAD

Too Expensive!!!

Commercial 360 Cameras



Giroptic

\$341.22 CAD

7/10 Rating

Pros:
Live Streaming
Multiple Attachments
3 cameras

Cons:
Kickstarter *
Not commercially available through
retailers such as Amazon



Ricoh Theta S

\$449.99 CAD

4.2/5 Rating

Pros:
Good Rating
Available commercially through retailers
Easy to create and upload 360 images
and video

Cons:
Price* (Although it is good compared to
others)



Bublcam

\$1094.99 CAD

Currently Sold Out

5/10 Rating

Pros:
Canadian (Toronto)
4 cameras

Cons:
Price
Sold out constantly
Not commercially available
through retailers such as
Amazon



Kodak

\$356.30 CAD

3.5/5 Rating

Pros:
Kodak is a reputable brand

Cons:
Mediocre rating
Not true 360



LG 360 Camera

\$279.95 CAD

4.1/5 Rating





Pros:
Value

Cons:
No Flash Memory

Street view ready 360° Cameras

Street View Mobile Ready: 360 cameras that can publish Street View directly from a mobile app.

Street View Auto Ready: 360 cameras tailored for vehicle-based collection with the highest accuracy.

| | | | |
|---|---|--|---|
|  <p>Street View mobile ready</p> <p>Giroptic NCTech Ltd. 360Fly KenXen</p> |  <p>Street View auto ready</p> <p>Sphericam Z CAM Insta360 NCTech Ltd.</p> |  <p>Street View vr ready</p> <p>Matterport NCTech Ltd. InsideMaps</p> |  <p>Street View workflow ready</p> <p>Samsung GoPro HumanEyes Tech. iGuide GoThru Garden Gnome Panoskin/LCP360</p> |
|---|---|--|---|

Street View VR ready: 360 cameras or systems that collect geometry in addition to generating sets of connected 360 photos.

Street View Workflow Ready: Publishing tools (sometimes bundled with cameras) that can upload to Street View accounts.

Google Cardboard Viewers



Google Cardboard Viewers can be found online through retailers such as Amazon for as little as \$7 to \$10 but can range up to \$100+

The headsets are designed to fit different sized phones. Make sure to select a viewer that fits the size of your phones.

Here are some resources for Google Cardboard Viewers:

Get your Cardboard (most listed in USD)

<https://vr.google.com/cardboard/get-cardboard/>



Viewers can also be found on Amazon.ca by searching “Google Cardboard Viewers”

Images:

https://upload.wikimedia.org/wikipedia/commons/9/95/Assembled_Google_Cardboard_VR_mount.jpg

https://c1.staticflickr.com/8/7311/16358505058_85c0f234a6_b.jpg

Image Sources

Discovery Centre /Library images:

https://library.carleton.ca/sites/default/files/service_points/discovery_landscape.jpg

<http://ottawa.ca/include/doors/Discovery%20Centre,%20MacOdrum%20Library.jpg>

<http://apt613.ca/wp-content/uploads/2014/11/Image-31.jpg>

Mother ship of all cameras slide image sources

Google 360 Camera Photos: <https://petapixel.com/2015/05/28/the-google-jump-360-camera-rig-uses-16-gopros/>

Independence Day Photos from: <http://www.savethecat.com/wp-content/uploads/2016/06/independence-day-image.jpg>

<http://vignette1.wikia.nocookie.net/id4/images/6/65/ScreenShot016.jpg/revision/latest?cb=20131215165158>

360 camera slide image sources

Giroptic: <https://photos.prnewswire.com/prnvar/20160609/377660?max=1600>

Ricoh Theta: https://www.bhphotovideo.com/images/images2000x2000/ricoh_910720_theta_s_spherical_digital_1183083.jpg

Kodak: https://www.bhphotovideo.com/images/images2500x2500/kodak_sp360_yl_sp360_action_camera_16mp_cmos_1086567.jpg

LG 360 Camera: https://images-na.ssl-images-amazon.com/images/I/414WJx%2BGDtL_SY300_.jpg

Bublcam: https://cdn.shopify.com/s/files/1/0802/7203/files/BUBL_002_large.png?5155218604182746956