Image\_stereo

Matlab Function:

* genStereo.m  
  This function generates the left and right stereo images from the given image

Matlab Executable:

* run\_genImages.m  
  This generates the stereo images for the given list of input images, and exports the results

Video\_stereo

Matlab Function:

* genStereo.m  
  This function generates the left and right stereo images from the given image
* genStereoLogo.m  
  This function generates the left and right stereo images and alpha values of the given logo image
* genStereoVid.m  
  This function applies the stereo version of the logo onto every frame of the input video, and exports the resulting stereo videos
* genStereoRotatedLogo.m  
  This function generates the left and right stereo images and alpha values of the given logo image rotated vertically
* genStereoVidAnimatedLogo.m  
  This function creates the left and right stereo videos with animated logo added. The animated logo rotates vertically and its opacity gradually changes
* loadSubs.m  
  This function loads the subtitle txt files (text and time)
* genStereoSubs.m  
  This function applies the subtitles to the input video

Matlab Executable:

* run\_applyLogo.m  
  This generates the stereo videos for the input image, after applying the given logo
* run\_applySubs.m  
  This generates the stereo videos for the input image, after applying the given subtitles
* run\_applyAnimatedLogo.m  
  This generates the stereo videos for the input image, after applying the animated logo

CardBoardDemo

* ImageCardboard.java  
  This loads the two input images and display them side by side, each of which is resized to properly fit the screen and centered.  
  It uses the Accelerometer of the phone to determine its orientation. When the phone is placed horizontally with screen facing upward, it switches to the next image pair. When the screen faces downward, it switches to display the previous image pair.  
  It uses the Magnetic Sensor of the phone to detect magnetic field changes. Placing a magnet near to the phone will trigger it to switch between two modes: normal and zoomed.  
  For zoomed mode, the images are enlarged by 2 times of the normal mode. Also, the left and right images are displaced with calculated disparity so that they look as if placed around 90mm in front of the viewer.
* VideoCardboard.java  
  This loads the two input videos and display them side by side.  
  It uses the Accelerometer of the phone to determine its orientation. When the phone is placed horizontally with screen facing upward, it switches to the next video pair. When the screen faces downward, it switches to display the previous video pair.  
  It uses the Magnetic Sensor of the phone to detect magnetic field changes. Placing a magnet near to the phone will trigger it to pause or resume the video.
* PanoramaCardboard.java  
  This loads the input panorama image, display it on both the left and right halves of the screen, enlarge the image and perform affine transformations to the image so that it matches the movement of the phone/cardboard.  
  It uses the Magnetic Sensor of the phone to detect magnetic field changes. Placing a magnet near to the phone will trigger it to switch between two modes: normal and zoomed. For zoomed mode, the images are enlarged by 2 times of the normal mode.