## Stitched Panoramic Photography

Panoramic 360-degree prints are made by joining multiple photographs with slightly overlapping fields of view to create a panoramic image. Stitching software is used to combine multiple images. In order to correctly stitch images together without parallax error, the camera must be rotated about the center of its entrance pupil.

These images show 360 degrees on the horizontal axis and 180 degrees on the vertical axis. Think of it as peeling an orange and then flattening the orange peel onto a flat surface. The center of the image has little distortion while the top and bottom edges are stretched out. This warping has the effect of making normally straight lines into beautiful curves.

Using an 8mm fisheye lens and AutoPano Giga stitching software, students in the DGM3265 Virtual Reality class created these prints. These same images can be loaded onto a web page, which allows the user to virtually navigate the room or outdoor space using a mouse. These virtual tours can be seen at http://virtual.uvu.edu.