

# **Comp Photography (Fall 2015)**

## **HW 10**

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# Describe the Sites you chose

Site 1: Photosynth of the Austin city skyline from Zilker Park  
Panoramic views taken with a drone camera.

Site 2: Panorama taken at Doug Sahm Hill  
A scenic hilltop in a park near downtown Austin.

Site 3: Wall Photosynth of the HOPE Outdoor Gallery  
A collection of graffiti wall art in a residential area.

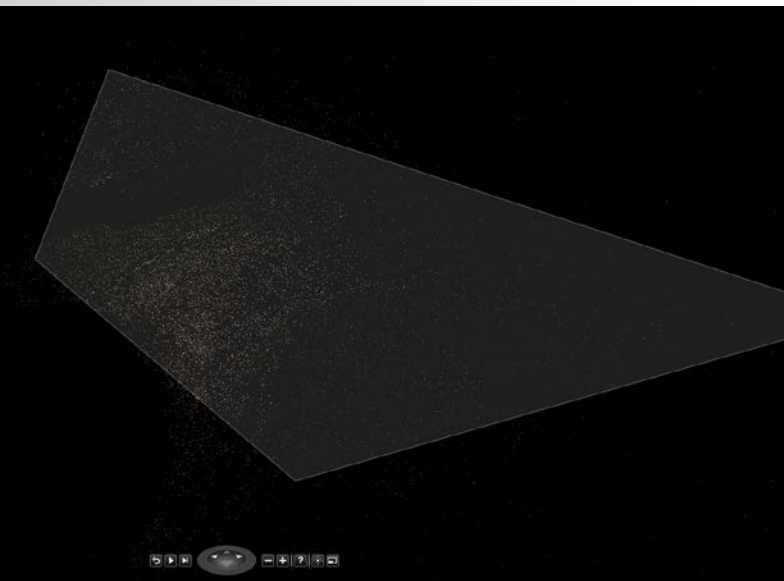
Site 4: Walk Photosynth at Mount Bonnell  
A dronie (drone selfie) at the highest point in Austin.

# Site 1: Photosynth of Austin Skyline

This (old/legacy) photosynth consisted of 29 photographs.



# Site 1: Photosynth of Austin Skyline



Photosynth: <https://photosynth.net/view.aspx?cid=072aa005-7616-4621-81f6-36ea2f7cc0c9>

# Site 1: Details

I generated this photosynth using Microsoft's desktop application. The 29 input images were taken with a GoPro camera mounted on a drone, approximately 75m above ground level. The panoramic scene was captured by adjusting the drone's yaw a full 360 degrees. I was also able to capture a little more of the scene by tilting the camera gimbal. The resulting 3D point cloud was able to detect a wide distribution of points in the space.

*What would you do differently?*

Next time, I'd like to capture even more of the scene to resemble a complete photosphere.

## Site 2: Panorama at Doug Sahm Hill

*How many photographs?* 23 photographs

*How much of a FOV change was this?*  $\sim 15^\circ$  FOV change

*What kind of a Panorama is this?*  $360^\circ$  Rotational

*What software did you use?* Microsoft ICE and Photosynth



# Site 2: Panorama Input



## Site 2: Panorama Output (aspect ratio not preserved)



High res: <https://drive.google.com/file/d/0B-9-oKYR8vK2dG16QmIJN2tGekE/view?usp=sharing>

Photosynth: <https://photosynth.net/view.aspx?cid=145bf411-bc03-42f6-ade2-9feeb05889f3>

Photosynth 3D: <https://photosynth.net/preview/view/ac66ea6f-e3e2-4dcc-90fa-7f15ad819541>



## Site 2: Details

This panorama was created using Microsoft's Image Composite Editor. It easily took care of image warping, alignment, and stitching. The 23 input images were taken using a tripod and rotating in place at ~15 degree step sizes. The result is a neat panorama that shows both city and green space in a large field of view.

What would you do differently?

Next time, I'd like to adjust the subject framing (less sky, more interesting ground) to create a more artistic result.

# Site 3: Photosynth of HOPE Outdoor Gallery

This wall photosynth consisted of 21 photographs.



# Site 3: Photosynth of HOPE Outdoor Gallery



Photosynth 3D: <https://photosynth.net/preview/view/e905a76e-77e6-4eba-b9d8-c4980d1888e6>

## Site 3: Details

This wall photosynth was generated using the Photosynth 3D preview. I captured the scene by taking a planar panorama. The resulting photosynth animation creates a cool 3D effect because there is a lot of depth in the scene. The wall structures, colorful murals, and dynamic human subjects create a mesmerizing portrayal of the scene.

What would you do differently?

Next time, I'd work on focusing in on specific murals. This would add another dimension to the photosynth and help with artifacts and occlusions.



# Site 4: Photosynth at Mount Bonnell

This walk photosynth consisted of 22 photographs.





# Site 4: Photosynth at Mount Bonnell



Photosynth 3D: <https://photosynth.net/preview/view/44352e32-ef60-488e-a7d5-6632d61a8777>

## Site 4: Details

This walk photosynth was generated using the Photosynth 3D preview. Rather than a “walk”, I took advantage of my drone’s stable gimbal-attached camera to create a flyby perspective. Commonly called a “dronie”, I flew the camera away from myself to reveal a larger, more majestic scene. This seemed to work well in the resulting photosynth as the cliff and trees provided depth.

What would you do differently?

Next time, I’d like to fly the camera even further out to reveal more of Mount Bonnell and the lake below.

# Any other details.

I had a lot of fun with this assignment, choosing the sites and planning how to showcase them with photosynths. When done right, photosynths add an immersive layer to 2-dimensional static images. I hope this medium of photography starts to catch on!