

Comp Photography (Spring 2015)

HW 10

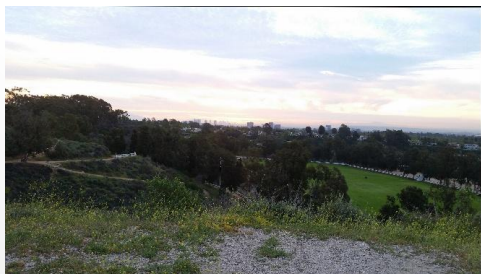
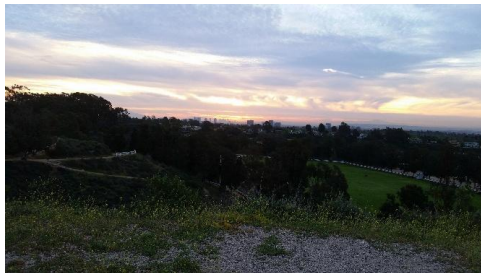
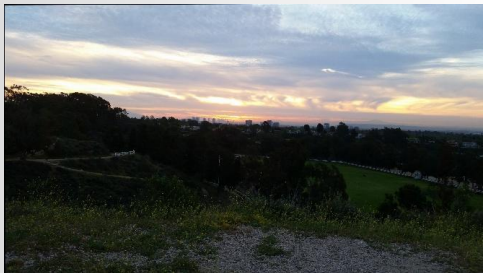
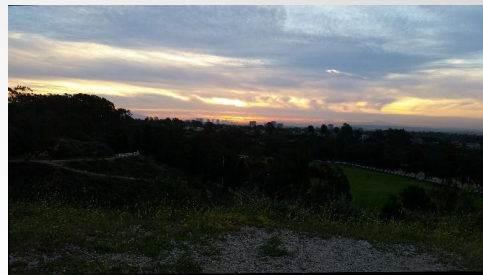
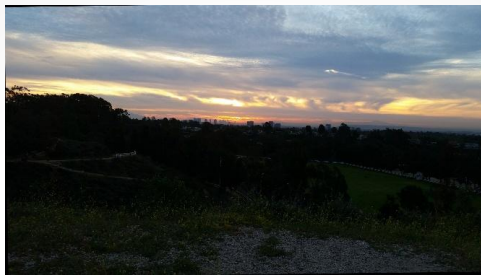
Jonathan Hudgins

Output From Input Images

This output is virtually identical to the example answer. The detail of the rug and chairs under the table is clear as is the detail in the top windows. No individual photo detail visible in both the dark foreground and bright background.



Source Images



Details

I took these photos of a sunrise overlooking Los Angeles from the Will Rogers State park with my Samsung S5 phone camera with the exposure value from -2.0 to 2.0 in 0.5 increments. There is about 5 seconds between each shot while I changed the EV setting. This causes movements in the clouds, the sun, and the near vegetation. Because the photos are from holding the camera (instead of a tripod) there are small movements to the camera.

I warped the photos using SIFT, findHomography and warpPerspectives so that the pixels would match up. I also downsampled the photos (1/8th the size because the originals are 15 MegaPixels).

Results From Using All 9 Images

The vegetation is more blurry as are the clouds. But the colors are more natural than the image created from 3 sources.

Detail from both dark and light levels of photo are clear in this composite HDR image.



Results From Using Extreme 3 Images

This image shows more detail in the clouds and the sunrise.

However, there is a reddish tinge. A global color shift in the red channel could compensate and improve the naturalness of this composite image.

