

Assignment 11  
David Vinegar  
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Candle GIF:  
<https://imgur.com/biF6pgf>

For the above candle GIF, I stuck with the default alpha value of 1 divided by the number of rows in the transition difference array. The indices I received were start of 37 and end of 89.

Getting this to work for me was not trivial. The merge.py file would not work on my mac. I tried many different video file formats as well as altering other parameters. Luckily, a classmate posted a link to the website [gifmaker.me](http://gifmaker.me). I uploaded the frames to [gifmaker.me/#CC1](http://gifmaker.me/#CC1). This created the GIF. I then downloaded the GIF to my computer and uploaded it to imgur. [gifmaker.me](http://gifmaker.me) is a great little site; it also enables choosing animation speed. This took a while for me to get right. In general, I found that faster is better. 500 milliseconds, gif maker's default setting, was far too slow, so I ended up settling on 50 milliseconds to get the most realistic video possible.

Here is a GIF of my dog, Timber, scratching at a ball:  
<https://imgur.com/o2pHu55>

After I had broken down the video of my dog using split.py, I initially tried to run my assignment11.py code with the default alpha. The alpha came out to approximately .012. This didn't work at all. Each time I ran my code it only outputted one image, out of the 100 or so of my input images. I increased the alpha to .04 and still received just one image. I then went all the way up to 0.1, and finally received multiple images in my output folder. Why did .1 work, and .012 did not work? The answer is that .012 was trying to create a video that was too smooth. The frames the video broke down into didn't make for a transition as smooth as capable of satisfying an alpha of .012. An alpha of .1 enables the combining of frames that don't fit together as nicely as an alpha of .012 would require.

Since varying alpha didn't seem to make my video texture any better, I set out to find another way to improve. I trimmed the length of the dog video at the start and end to the segment that I thought would loop the smoothest. I went from using about 100 frames as input to 64 frames as input. Here is the result of that endeavor:

<https://imgur.com/lQ2egeo>

I would say that the quality of the smoothness is about the same. To get this video of my dog entailed me following her around for a while; she's quite a character and often does amusing things. I got lucky though that she happened to do something that loops well.

The next GIF I created is not well suited to smooth looping, unlike the first video of my dog. This next GIF is a short clip of me crowdsurfing. I followed the same process that I used to create the GIF of my dog. I am in the gray shirt.

<https://imgur.com/cA6mxeY>