

Special Visual Effects

assignment 2

Working with Interlaced Video Footage

This assignment is intended to get you comfortable doing high-quality effects work with interlaced video footage. Specifically, you are going to shoot a short video clip of a moving object, rotoscope a high-quality articulated matte for that object, and then composite the object over a test background.

Pick an object that will be easy to shoot and that has very clean boundary lines (a box, a building, a simple boxy model like a train car, perhaps).

In adequate lighting (outdoor sun is best, but a well-lit interior will work too), shoot a short clip in which the object is moving relative to the camera. The goal is for you to record your object moving on the screen in such a way that obvious video interlace artifacts appear on the edges of your object.

- You can move the camera or the object or both in your quest to find bad interlacing artifacts.
- Shoot enough footage that you can find a good 1-2 second clip with motion.

The serrated edges created by the interlacing process makes clean matte creation almost impossible. Therefore, you are to de-interlace the footage, rotoscope each *field*, then render back to 29.97 frames per second when you're done. Use the approach covered in class:

- When you import your footage into After Effects, be sure that it is *separating fields* (from the Interpret Footage menu). Most devices around here use lower field first, but check the AE help guide on "interpreting field order" if you want to be sure about your footage.
- Create a full-resolution DV composition (720x480, 0.9 pixel aspect ratio) of the proper duration, but instead of using 29.97 frames per second use twice that (59.94 fps).
- Import your footage into your new composition.
- Create a solid layer with RGB color values of 142, 255, 192 (or thereabouts) and use this as a backdrop behind your video. This is for checking the accuracy of your matte.
- When you move "frame by frame" through your composition, you will be moving field by field through your original video footage. Create an animated mask shape as you normally would to create a matte for each field of the motion. NOTE: use a boxy/linear object so that mask creation is simple. Do NOT make this assignment any harder than it is!
- When you're done, render a movie. Use "best" settings, but customize them by turning on field rendering (lower field first), and set it to render to the 29.97 fps rate (even though the composition is set to 59.97). This will render the fields back into fields. Use the DVNTSC codec at best quality. If your clip is 2 seconds, your movie should be under 10Mb in size.
- Hand in the QT movie, and be sure to put it on your reel too (no need to hand in the reels this time - the QT version has all the detail).

The assignment is **DUE Thursday February 18 at the beginning of class.**

Don't forget the resources available to you:

- The AE user guide (go to the Help menu when running AE)
- The Adobe "support knowledgebase" (<http://www.adobe.com:80/support/techdocs/2248e.htm> is particularly appropriate!)
- The class email list (cs290s03@lists.hampshire.edu)
- Me (perry@hampshire.edu).