

Due on Monday, October 7, 2019 at 11:59 pm

Answer all problems following the instructions. Please include the written and programming portions in a zipped folder titled “Lastname\_firstname\_hw2.zip”

## 1 EEE problems

All EEE problems are extra-credit.

## 2 Max Patches

### **Problem 1.** *Transformations on Images*

Use the SimpleTransforms.maxpat and ProjectiveTransforms.maxpat uploaded on Canvas/-Max Patches/Geometric Transforms to experiment with transformations on images. Create a new max patch that utilizes these transforms to manipulate video (open to you what you want to explore).

### **Problem 2.** *Image Stitching*

Build a maxpatch that stitches an image panorama. To do this, you might want to utilize some knowledge of which direction your camera is facing (e.g. instruct the user to turn the camera 45 degrees and capture 8 images total), and then use that approximate rotation to stitch the image together. Try to use the ProjectiveTransforms to get the warping correct (experiment with matrix values till you get something you like).