

**CS335 Program 5: “JMorph” (completed)**  
**Due Thursday, December 6**  
**[No Late Submissions Accepted]**

## **1. Introduction**

The goal of this project is to provide a user interface and backend driver that supports the specification and rendering of a piecewise (triangular) image morph between two images. Once specified, the morph will be rendered as a sequence of images that can be wrapped as a video (AVI, for example) and used in standard video editing software. Your work in this phase will complete the backend of the framework by applying the specified transitions to the underlying target images and by adding additional features.

## **2. Features**

Now that the user can position a 10x10 grid of control points on the start and end images, you must render the morph that warps and cross-dissolves between the two images. This means that the user must be able to read in the desired images (you must use a menu and a file browser widget). The computed warp should follow the positions of the two sets of triangles. The cross-dissolve should linearly scale the intensities between start and end images over the interpolation interval. Render tween images as JPEGs.

As an enhancement, provide the ability to apply a simple intensity adjustment to the start and end images. In particular, you must allow the user to adjust/change the brightness of the images. You may design how the interface will allow these changes to be specified. The morph should use the current image intensity values (after any image processing adjustments have been applied).

## **3. What to Turn In**

You must submit a complete solution with both internal and external documentation via the class submission webpage. In addition, submit a complete AVI file that demonstrates a transition or set of transitions created by your tool. Create this AVI by wrapping the JPEG frames from your tool with some 3<sup>rd</sup> party software (for example, JPG Video: <http://www.snapfiles.com/get/jpgvideo.html>) Make sure that the AVI can play under a standard installation of the Windows Media Player.