## Final Project Proposal Implementing Seam Carving Algorithm

Provide a brief description of your project and what programming you envision doing

- For this project, we plan to implement the Seam Carving Algorithm from scratch, with steps from this <u>link</u>. As a part of this, we will need to write/adapt the Dijkstra's Algorithm to find the minimum seam(s) on the edge, compute the energy map of the image as a gradient, and some other intermediate steps.
- If there is time, it would be interesting to do seam carving down to the display size of the OpenCV window displaying an image, sort of similar to the example given in the Final Project page.

What software (other than OpenCV) are you planning to use? Have you installed it yet? If not, when will it be installed?

- We are going to primarily be using OpenCV, but might compare our results with SciKit's built in seam-carving tool. We already have this installed as part of Anaconda.

Where will you be getting your data from?

- We can take some landscape photos or other photos to try seam-carving on, and also look for examples on Google Images.