Digital Image Processing COL 783

Assignment 2 : Digital Make Up Transfer and Stylization

Due Date: 10.04.2021 extended to 12.04.2021

This part of assignment is about implementation of the paper on [Digital Face Makeup by Example](https://www.cse.iitd.ac.in/~pkalra/col783/assignment2/face_makeup_cvpr09_lowres.pdf) (https://www.cse.iitd.ac.in/~pkalra/col783/assignment2/face_makeup_cvpr09_lowres.pdf).

The basic idea is --given a reference face image A with a make up, and another face image B without a makeup (a different face), obtain the face image B' with makeup derived from the reference image A. In addition consider that the image B is stylized using [xDoG (https://www.cse.iitd.ac.in/~pkalra/col783/winnemoeller-cag2012.pdf)](https://www.cse.iitd.ac.in/~pkalra/col783/winnemoeller-cag2012.pdf) before the make up is transferred.

The sample results are shown [here. (https://www.cse.iitd.ac.in/~pkalra/col783/assignment2/makeup-example.png)](https://www.cse.iitd.ac.in/~pkalra/col783/assignment2/makeup-example.png) .

You have to implement Bilater filtering in place of WLS filter that is suggested in the paper and for warping the image you should use the triangle method as discussed in the class.