

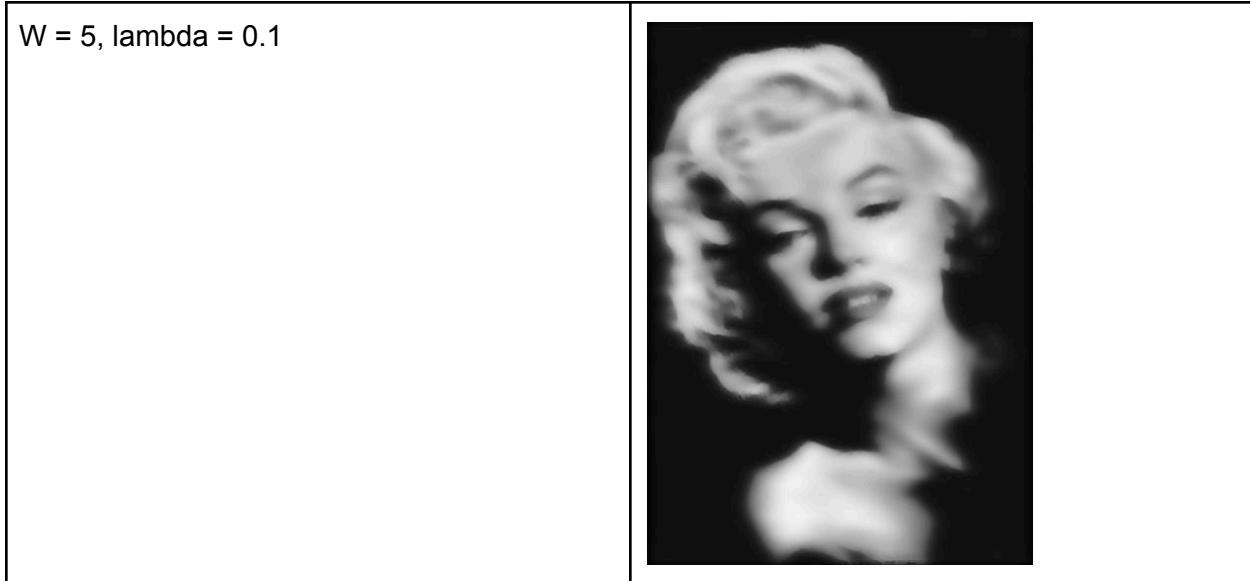
Programming Assignment 3

In this assignment, we will implement the spatial filter proposed by Aydin et al. [2014]. The most relevant parts of this paper for this assignment are Sections 4.1 and 4.2.

Part 1: Iterative edge-aware filtering (60 pts)

To Run: run `edge.py`

Results - image1:



$W = 5$, $\lambda = 1$



$W = 5$, $\lambda = 10$



$W = 10$, $\lambda = 0.1$



$W = 10$, $\lambda = 1$



$W = 10$, $\lambda = 10$



$W = 20$, $\lambda = 0.1$



$W = 20$, $\lambda = 1$



$W = 20$, $\lambda = 10$

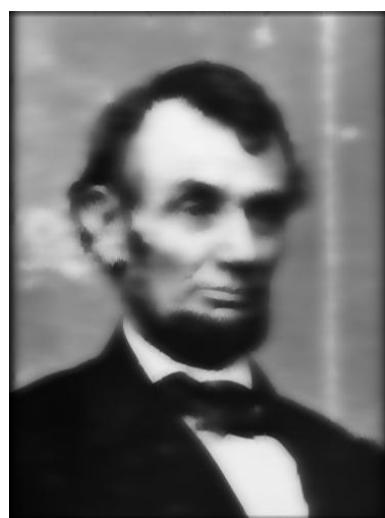


$W = 10$, $\lambda = 10$

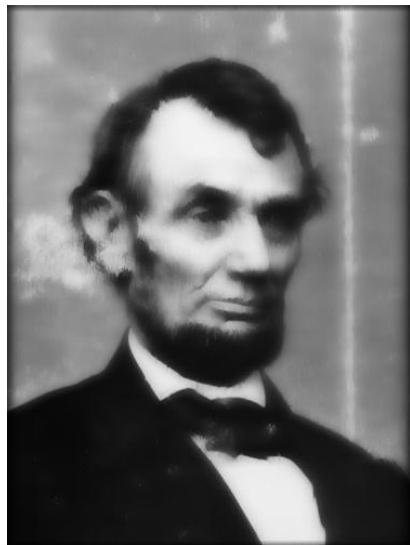


Results_image2:

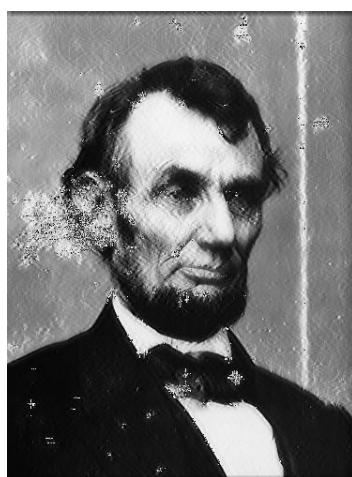
$W = 5$, $\lambda = 0.1$



$W = 5$, $\lambda = 1$



$W = 5$, $\lambda = 10$



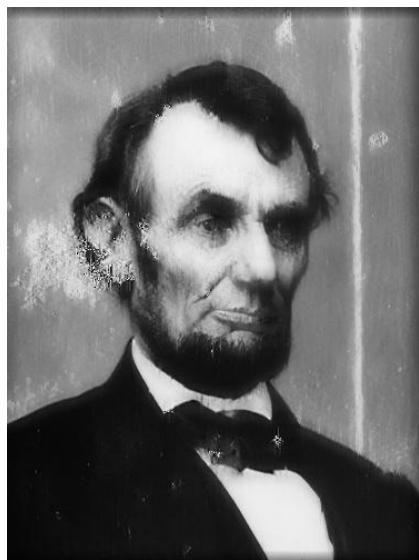
$W = 10$, $\lambda = 0.1$



$W = 10, \lambda = 1$



$W = 10, \lambda = 10$



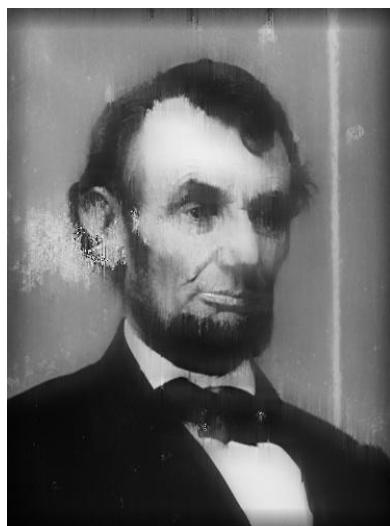
$W = 20, \lambda = 0.1$



$W = 20$, $\lambda = 1$



$W = 20$, $\lambda = 10$



Part 2: Cross-filtering (40 pts)'

To run: run cross.py

Image1: carpet

Flash:



No flash:



Bilateral:



My result($W = 10$
 $\lambda_{val} = 5$)

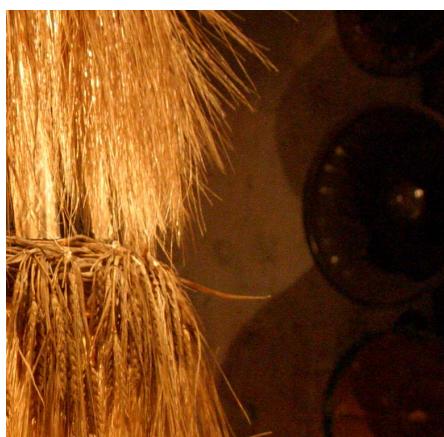


Another image: lamp

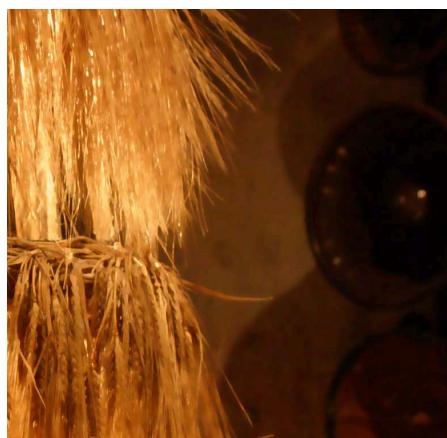
Flash:



No Flash:



Bilateral:



My result($W = 10$
 $\lambda_{val} = 5$)

