**CSE327 Fall 2023 Homework 3 (10 points total)**

**Due Sep 27 2023 11:59PM via Brightspace.**

**1. Box filtering (2pts)**

Apply a 3 x 3 box filter to the camera man image. Visualize the result. You can change the box filter size to compare the results.

**2. Gaussian filtering (2pts)**

Apply a Gaussian filter with sigma=1.2 to the camera man image. Visualize the result. You can change the sigma value to compare the results.

**3. Bilateral filtering (6pts)**

Apply the bilateral filtering to image “sarah.jpg”. Visualize the result. You can change the sigma\_spatial and sigma\_intensity to compare the results. You are encouraged to try your own images too.

Upload your source codes (with necessary comments for our TA to understand them) to Brightspace. Your codes are supposed to generate some results for our TA to visualize. If you use notebook in Python, you can upload the notebook file directly (i.e., input and filtered images are embedded in the notebook file).