EE7204: COMPUTER VISION AND IMAGE PROCESSING

TAKE HOME ASSIGNMENT 01

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REG NO. : EG/2018/3471

SEMESTER : 07

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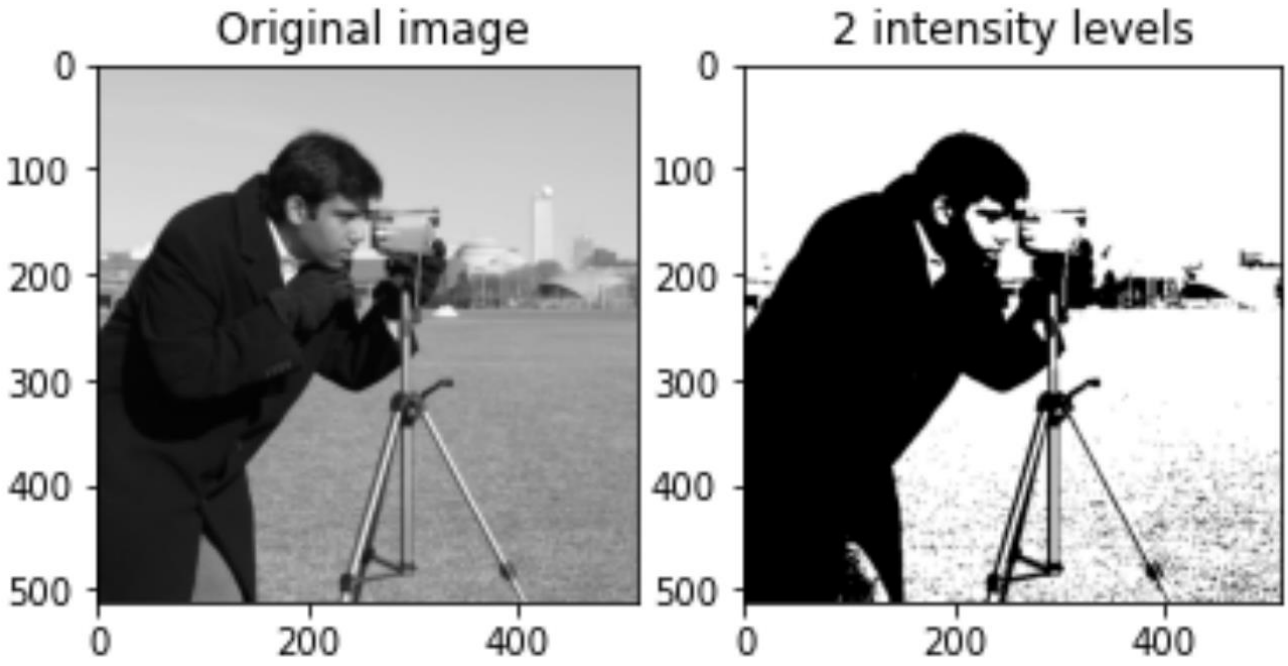
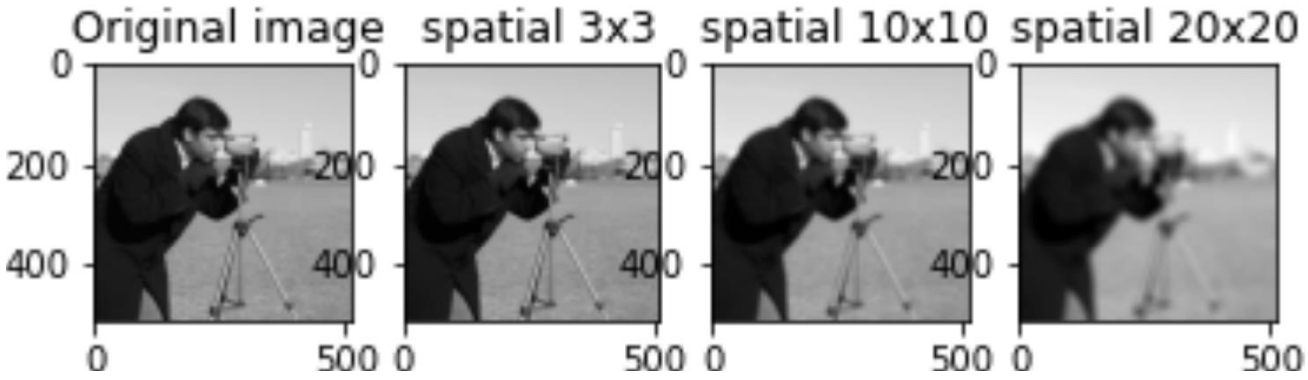
Results

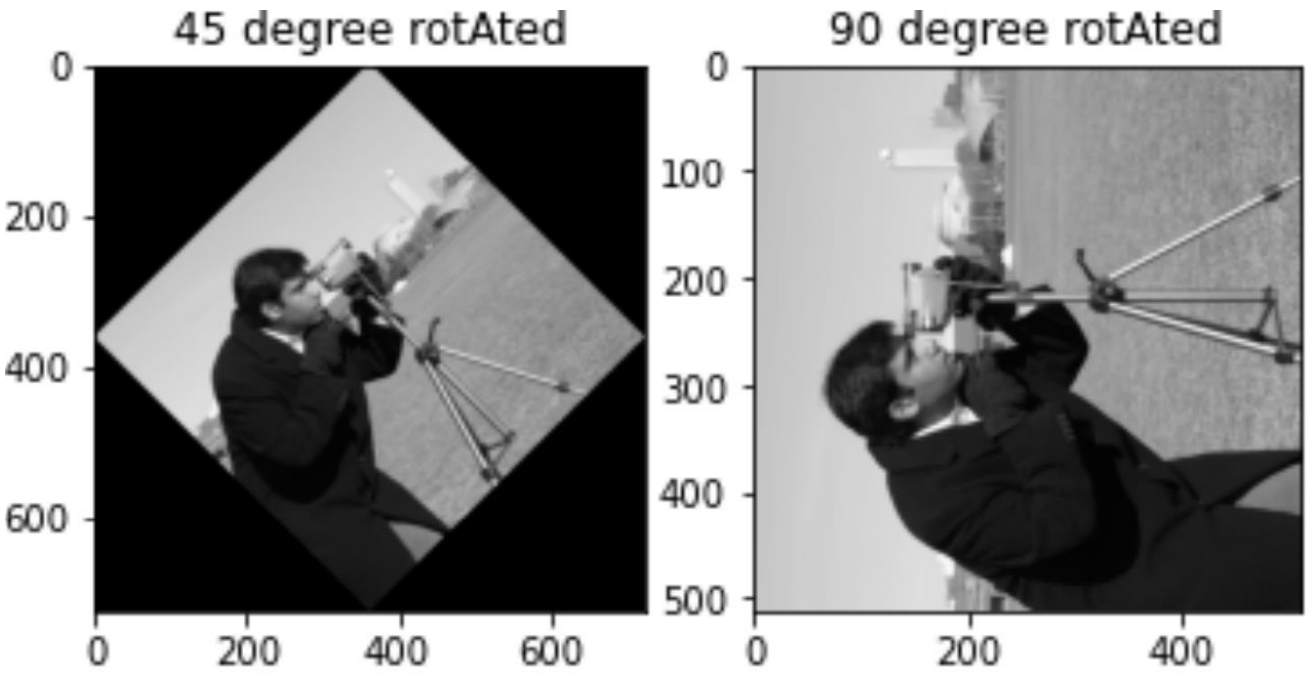
1. To reduce the number of intensity levels in an image from 256 to 2, in integer powers of 2. The desired number of intensity levels needs to be a variable input to your program.



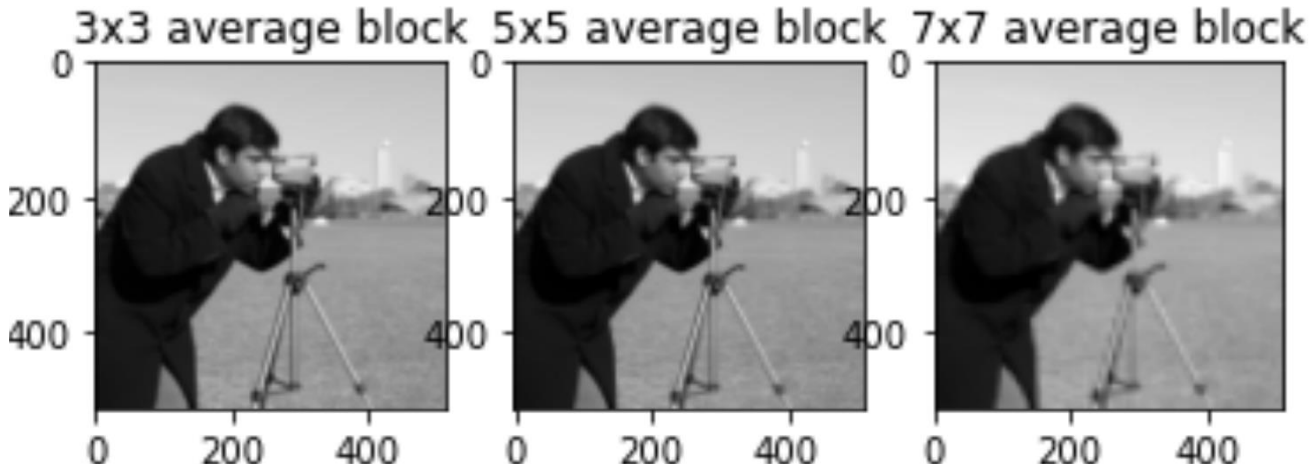
2. Load an image and then perform a simple spatial 3x3 average of image pixels. Repeat the process for a 10x10 neighborhood and again for a 20x20 neighborhood.



3. Rotate an image by 45 and 90 degrees.



4. For every 3×3 block of the image (without overlapping), replace all corresponding 9 pixels by their average. This operation simulates reducing the image spatial resolution. Repeat this for 5×5 blocks and 7×7 blocks.



https://github.com/NHMSudara/EG_2018_3471_COMPUTER_VISION.git