


Task 2.1P Answer sheet

Fill in the “**Results**” column with relevant results

Notes:

- Missing any required results will result in a re-submission.

	Results
Filtering using Gaussian kernel	

Filtering using corner kernel



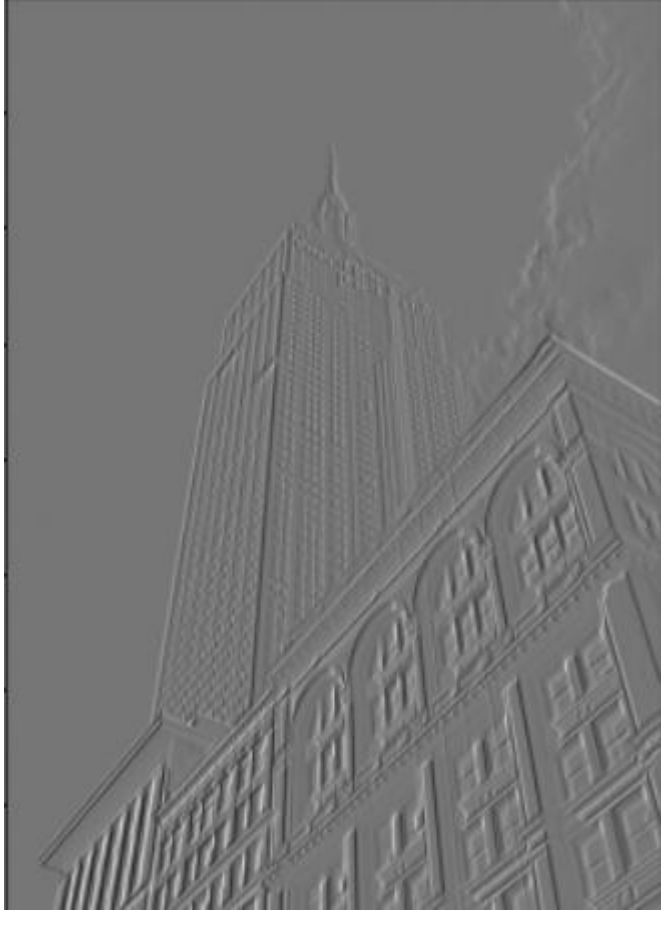
Median filtering

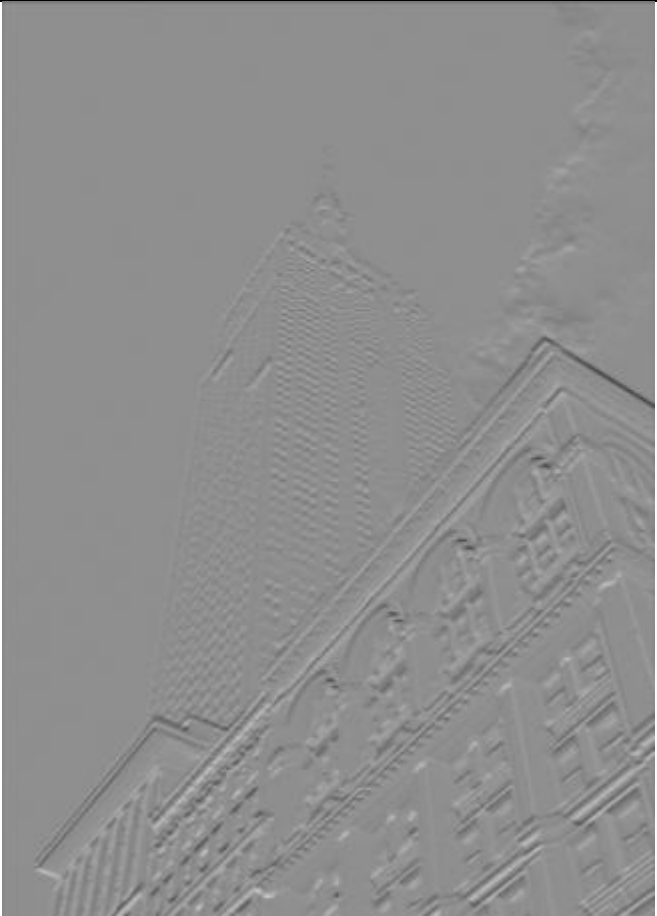



Bilateral filtering



Horizontal derivative image (i.e., der_x)

	
Vertical derivative image (i.e., der_y)	

	
Gradient magnitude image (i.e., mag_img_gray)	

	
Canny edge image (i.e., Canny_edges)	



Discussion

Areas of intensity change are shown in the gradient magnitude picture created by the Sobel filter. This technique is easy to use and straightforward, but it creates wider edges and is prone to noise. On the other hand, the Canny edge detector uses a combination of noise reduction, edge tracking using hysteresis, and gradient computation. Canny generates edges that are more consistent, clean, and sharper as a result. For edge detection tasks, its robustness and dependability are increased by its capacity to filter out weak and isolated gradient responses.