CS 6420	Topics in Image Processing and Computer Vision	Test 1
Name:	Spring 2021	Max Pts: 64

Important: This is an open book test. You can use any books, notes, or paper.

1. [8 pt] What is the sifting property of an impulse? How is it characterized with discrete variables?
2. [8 pt] What is the significance of Nyquist rate? How does it relate to the sampling theorem?
3. [8 pt] What is a nonphysical filter. Give an example of one.
4. [8 pt] What is salt-and-pepper noise? How can you estimate it in an image? Suggest some ways to remove it in an image.
5. [8 pt] What is the difference between a mean filter and a median filter? Under what circumstances will you prefer each of them?
6. [8 pt] What is a ramp edge? How will you detect a ramp edge?
7. [8 pt] What is the significance of two different thresholds in the Canny edge detector?
8. [8 pt] What is the advantage of using Otsu's thresholding over simple global thresholding?