

# Project #6

assign June 1, 2020 due June 7, 2020

Consider the gray-scale image, **image-pj6(Canny).tif** below, apply Canny edge detection algorithm to obtain the edge image by using the following setup and parameters:

$\sigma$  of Gaussian smoothing filter: 0.5% of the shortest dimension of the image

Sobel operator for computing gradient vectors

Hysteresis thresholding:  $T_H = 0.10$   $T_L = 0.04$

Your report (Word or pdf format) should contain:

- Source codes (30%)
- Figures of the gradient magnitude and gradient angle images (30%)
- Figures of  $g_{NL}(x,y)$  and  $g_{NH}(x,y)$  (20%)
- Figure of final edge map (20%)

**Note: Images must be plotted with good resolution (at least 12cm×12cm).**

**Upload your report to new e3 before due time!**

