

Name: \_\_\_\_\_

## COL7(6)83 Quiz 9

Entry no.: \_\_\_\_\_

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1. What would be the downside if Canny edge detection were performed without Gaussian smoothing? What about without non-maximum suppression?

2. In the context of intensity thresholding, explain why the between-class variance  $\sigma_B^2(k)$  decreases towards zero towards both ends of the intensity range (i.e. as  $k$  approaches 0 or 255 for an 8-bit image).