

Syracuse University
Department of Electrical Engineering and Computer Science

CSE 400/691 Image and Video Processing
Spring 2020

Assignment III

CORNER DETECTION

- 1) [10%] First, apply Gaussian smoothing (with standard deviation σ) to an input image I , to obtain I_s ,
- 2) [70%] Implement the corner detection algorithm (CORNERS), by using I_s as input, as described in class and also in the textbook,
- 3) [20%] Test your corner detection algorithm on images “Building1.jpg” and “CheckerBoard.jpg”. Try different values of the σ , the neighborhood size, and the threshold (τ) on λ_2 . Compare and evaluate your results.

Hints:

- For eigenvalue computation: `help eig`
- For sorting: `help sort`, `help sortrows`