Computer Vision

EMARO- *European Master on Advanced Robotics*

Robotics Engineering *Master Degree*

Lab Session n. 2

Edge detection

- Write a MATLAB function that implements the Laplacian of Gaussian Operator:
  - sample and display the Laplacian of Gaussian with different spatial support and standard deviation.

- Convolve the test images with the Laplacian of Gaussian and display the results.

- Detect zerocrossings and apply a threshold on the slope of the zerocrossings:
  - scan along each row, record an edge point at the location of the zerocrossing;
  - then, do the same for each column.

- Test the algorithm with the provided images by varying the spatial support of the kernel and the threshold.