

Practicum Computational Vision

Practicum 1: Image processing toolbox in Matlab (Part III)

This session will practice the edge operators in Matlab.

1 Determine the optimal edges

Read the image "starbuck.jpg" and find its edges. Apply the different operators and find the optimal parameters for each of them. Overlap the edges on the image as shown in Fig.1 (right).



Fig.1 Original image (left), edges extracted (middle) and overlapping of edges and original image (right)

Which is the best edge detector? Which are the optimal parameters for this image?

Repeat the experiment on 3-4 other images from the zip file images.rar. Discuss if the parameters should be changed.

What are the advantages and disadvantages you see when extracting the edges on the different images?

Deadline: October, 30, 2014. This part will be delivered as a zipped file with separate functions corresponding to each edge operator.