Universitat Politècnica de Catalunya Universitat de Barcelona Universitat Rovira i Virgili

MASTER IN ARTIFICIAL INTELLIGENCE

COMPUTING VISION

Feature detection and matching (I)

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1 Question 1

Take at your own choice several keypoints that have been detected at different scales. Using the theory given in the lectures, comment on the reasons of why do you think that a keypoint has been detected at that position and at that particular scale. You may repeat the experiment with another image (such as 'river1') to understand what a significant keypoints is.

2 Question 2

2:Which is the effect when using the peak threshold=0.01 on the 'roofs1' image? Comment the differences with respect to the previous result (default value of the peak threshold=0).

3 Question 3

Try to slowly increase or decrease the (peak) threshold. Comment why the number of detected keypoints decreases when the threshold is increased. Is this the expected behavior according to the way the threshold is defined?

4 Question 4

Try to slowly increase or decrease the (edge) threshold. Comment why the number of detected keypoints decreases when the threshold is decreased. Is this the expected behavior according to the way the threshold is defined?

Appendices

A Annex

Some text in the annex.