

# IN5520 Mandatory 2

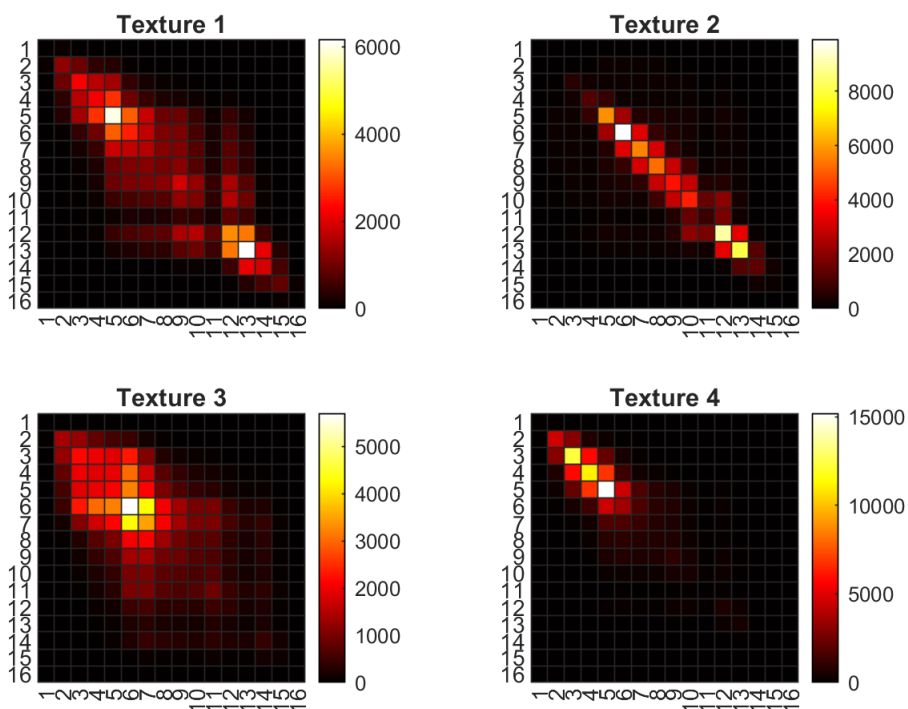
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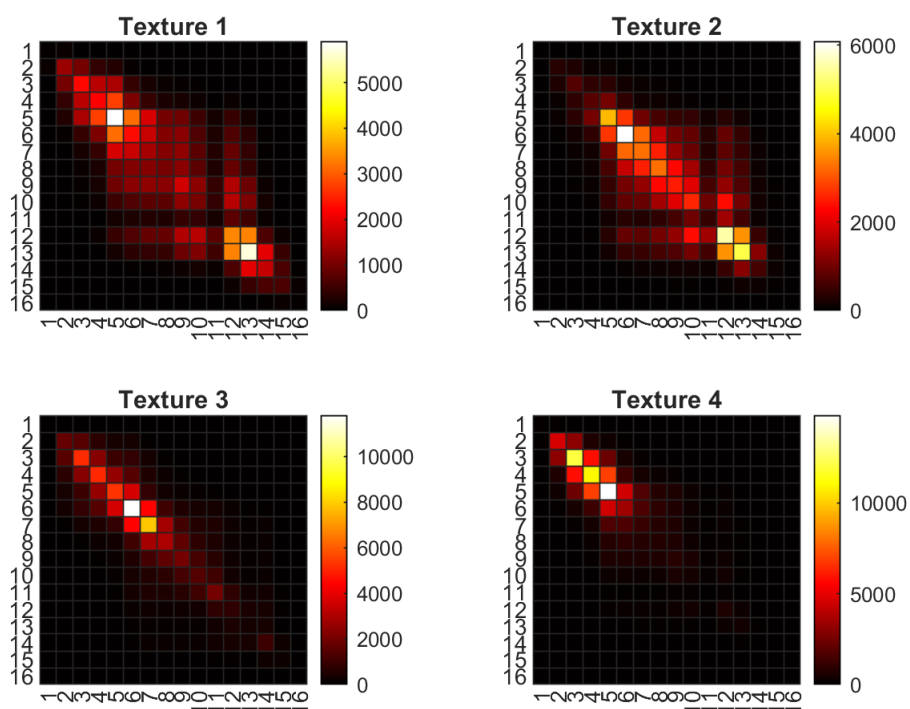
Task 1)

Plots of the glcms of the 4 textures for each direction:

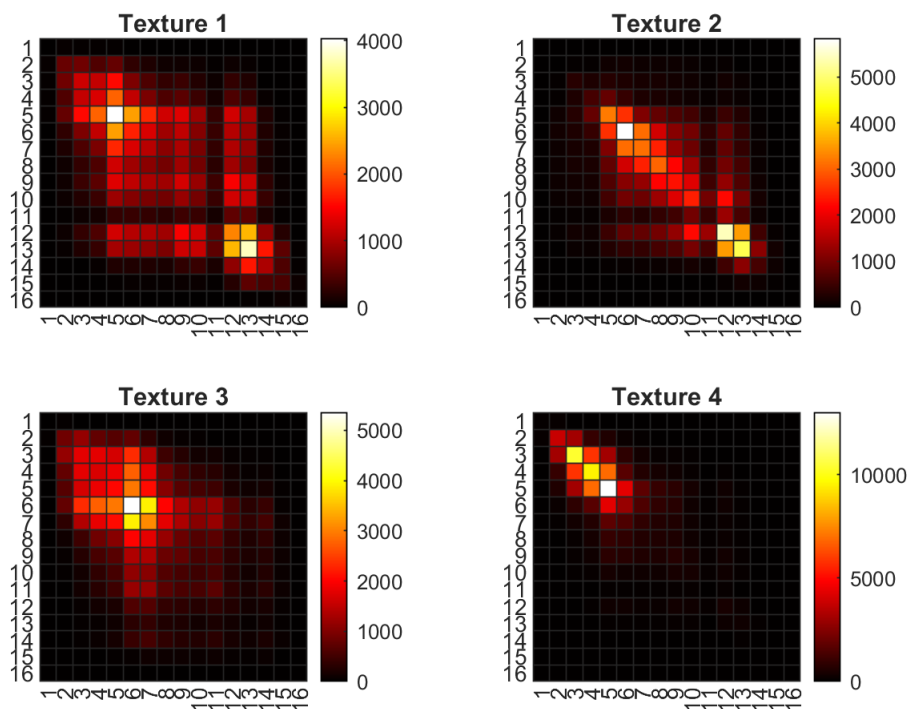
$dx=1, dy=0$



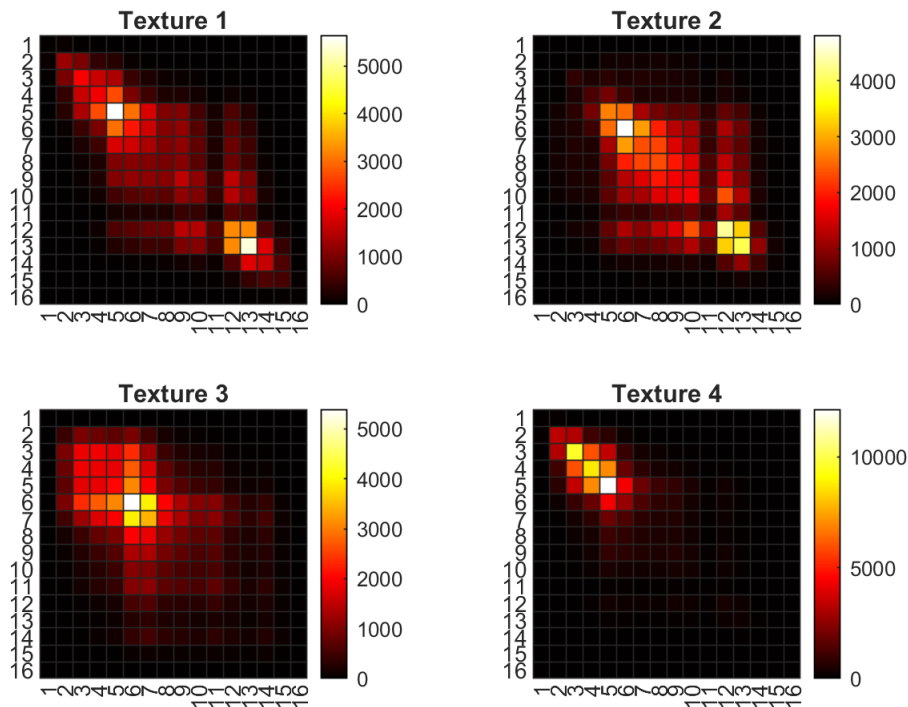
$dx=0, dy=-1$



$dx=1, dy=-1$



$dx=-1, dy=-1$



I don't think one direction will be enough to discriminate between all the textures. Because for all the directions at least two of the textures have very similar glcms.

Therefore i will chose two directions. As for which directions, i think  $dx=1, dy=0$  and  $dx=0, dy=-1$  will give a good chance for differentiating the textures.

Because each pair of textures are different in at least one direction.

(for convenience i will from now on call  $dx=1, dy=0$  for d1. And  $dx=0, dy=-1$  for d2)

e.g. texture 1 and 4 are different in both d1 and d2. But texture 1 and 2 are different in d1 but quite similar in d2.

Also texture 2 and 3 are quite different from themselves when comparing d1 and d2.

These differences between d1 and d2 should give us a lot of good information to give the classifier.

Task 2)