

## IN5520 - 2020

### Exercises on texture for Tuesday 01.09.2020

Use images from

<http://www.uio.no/studier/emner/matnat/ifi/in5520/h20/undervisningsmateriale/week2/>

The images zebra\_1.tif, zebra\_2.tif ... zebra\_6.tif contain some fine specimens of a particularly textured herbivore.

We will try to implement a zebra-detector by analyzing texture.

Task 1:

First, try to implement your own GLCM function that takes as input an image window and number of image greyscales and outputs a cooccurrence matrix.

Derive variance, contrast and entropy from the GLCM of a sliding window at a suitable size.

Task 2:

Try to use a simple thresholding of these features to mask out the zebras in the images.

Task 3:

Then compare your result with the first order texture measures: variance and entropy by using the Matlab functions: `stdfilt` and `entropyfilt`.

Happy zebra hunting!