

Oblig1 INF2270

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# Innhold

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## 1 Texture discription

First, when i describe the different textures, i will index the different images in the following way: (the same is true for the program)

img0		img1		img0		img1	
---	---	---	---	-----		-----	
0	1	4	5				
---	---	---	---	8		9	
2	3	6	7				
---	---	---	---	-----		-----	

This means i will start in the top left corner of mosaic1 and and in the bottom right corner of mosaic2. In the program 8 and 9 is reserved for the whole mosaic1 and mosaic2 respectivly.

## 1.1 Texture 0

### Characteristics:

Texture is mainly random noise. Somewhere in the texture you get some patterns that look like holes.

### Texture Direction

There are no preferred way the texture moves, although as mentioned, some similar patterns can be observed.

### Frequency

The crevasses are on a rough average 10px in diameter, and the edges between them are closer to 4px.

### Variance

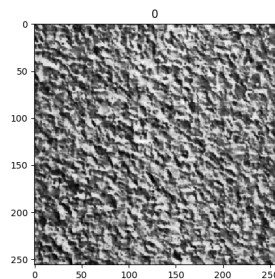
If we look at the histogram, we can see that it is one of the textures with the least variance. We do have some peaks that drive down the variance a bit.

### Homogeneity

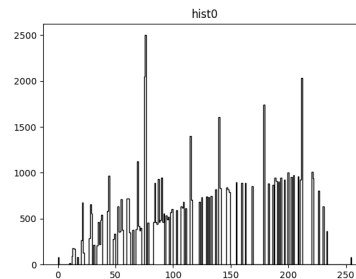
The texture has very few homogenous areas.

### Texture element size

As mentioned, element size is hard to determine.



(a) IMG 0



(b) Hist IMG 0

Figure 1: Texture with histogram

## 1.2 Texture 1

### Characteristics:

Texture has a clearer pattern of squares that is roughly 8 px wide and high. It is also some random noise on top of the texture.

### Texture Direction

The texture direction is almost horizontal (and vertical), with a slight skew.

### Frequency

The frequency of the texture is equal to the length of the squares.

### Variance

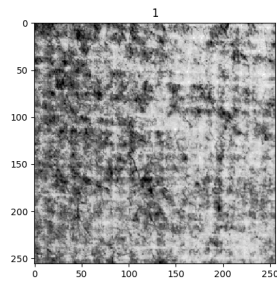
The histogram is fairly balanced, so the variance is in the middle of the spectrum. Especially compared to 3

### Homogeneity

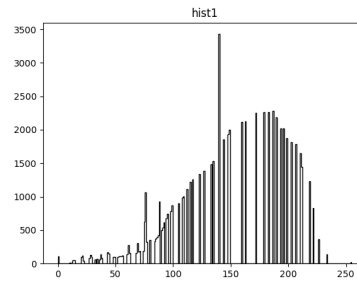
The texture has very few homogeneous areas.

### Texture element size

As mentioned, the squares have a diameter of approximately 7 px.



(a) IMG 1



(b) Hist IMG 1

Figur 2: Texture with histogram

### 1.3 Texture 2

#### Characteristics:

The texture is a series of lines that face in roughly the same direction.

#### Texture Direction

The majority of the stripes has an angle of 100deg.

#### Frequency

The frequency of the pattern, diagonally to the lines is **X** pixels.

#### Variance

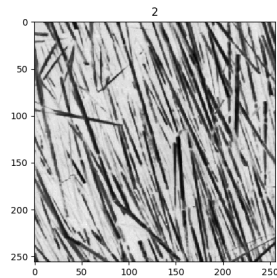
This pattern has a small variance, probably the smallest.

#### Homogeneity

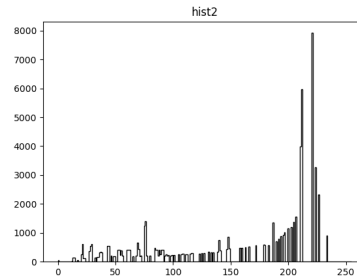
The texture is has very few homogeneous areas.

#### Texture element size

The element size is only a few pixels wide, and **X** pixels high.



(a) IMG 2



(b) Hist IMG 2

Figur 3: Texture with histogram

## 1.4 Texture 3

### Characteristics:

This seems like another white noise texture.

### Texture Direction

There are no clear direction in the texture. This and the first one is isotropic textures.

### Frequency

It is hard to say anything about the frequency, but a rough guess might be 2-3px

### Variance

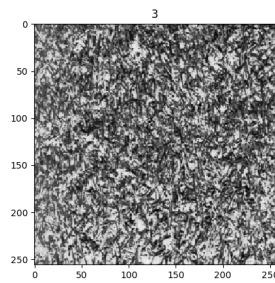
This pattern has a low variance, but the pixel value 75 upping the variance.

### Homogeneity

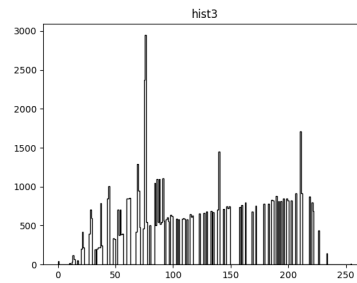
The texture is has very few homogene areas.

### Texture element size

The element size is only a few pixels wide, and **X** pixels high.



(a) IMG 3

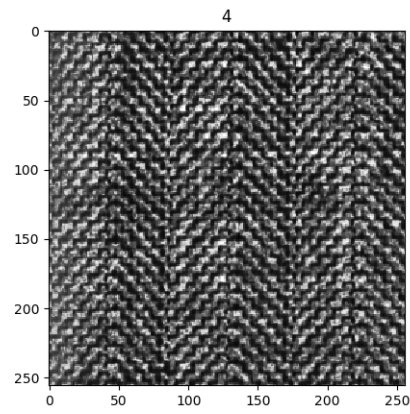


(b) Hist IMG 3

Figur 4: Texture with histogram

## 1.5 Texture 4

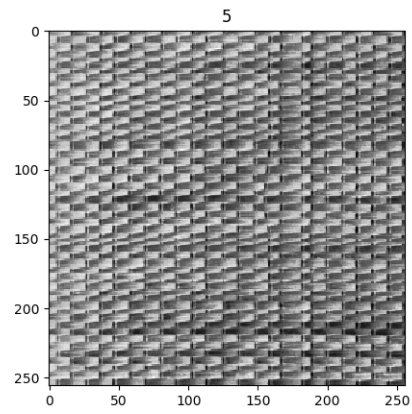
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texture disc of texture





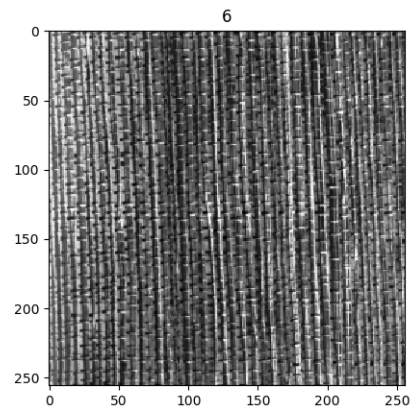
## 1.6 Texture 5

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texture disc of texture



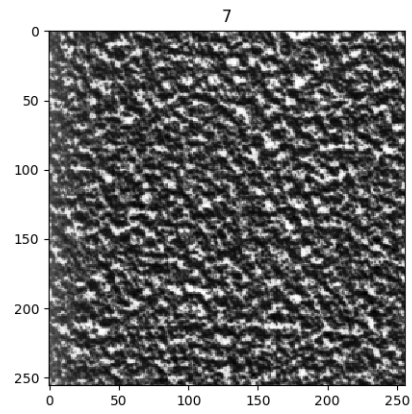
## 1.7 Texture 6

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texture disc of texture



## 1.8 Texture 7

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