

# SYTOSS\_NURE\_pngPairs100 dataset

## General description:

**Link:** [\*Dataset SYTOSS\\_NURE\\_pngPairs100\*](#)

**Equipment:** Sony Alpha a6000 camera (raw images in ARW: [\*RawDataset SYTOSS\\_NURE\\_arw\*](#))

**Format and size of the images:** the raw images were converted to **PNG** (lossless compression) and changed to a size of 600-400 or 400-600 pixels.

**Number of image pairs:** 100 pairs of photo images

**Dataset content:** the dataset contains five types of scenes (20 images in each set):

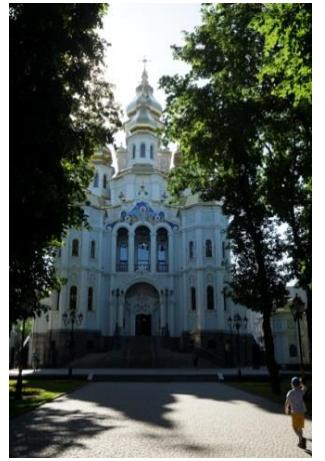
- **Building** – buildings, city;
- **Picture\_outside** – plane images outside (graffiti, posters and other plane images found at the streets);
- **Picture\_inside** – plane images inside (for example, interior images, pictures, books);
- **Texture\_artificial** – artificial textures;
- **Texture\_nature** – natural textures.

The each pair has geometric transformations of various complexity (displacement, scale, rotation, changes in the viewing angle).

## **Experiment goal:**

- to analyze quality and time costs of the normalization based on the descriptors SIFT, SURF, ORB, BRISK, KAZE, AKAZE, using the normalization results of 100 image pairs containing scenes of different types;
- to make recommendations regarding the choice of descriptors for solving specific problems.

## Building subset (20it.)

Pair #	Image pair		Pair #	Image pair	
	$B_1: \#_0.\text{png}$	$B_2: \#_1.\text{png}$		$B_1: \#_0.\text{png}$	$B_2: \#_1.\text{png}$
1			11		
2			12		
3			13		



8



18



9



19



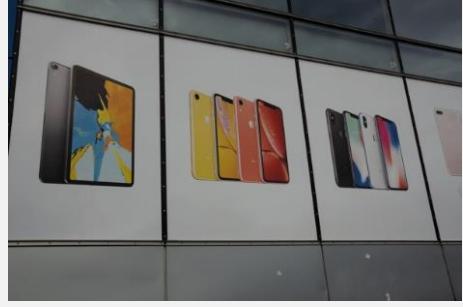
10

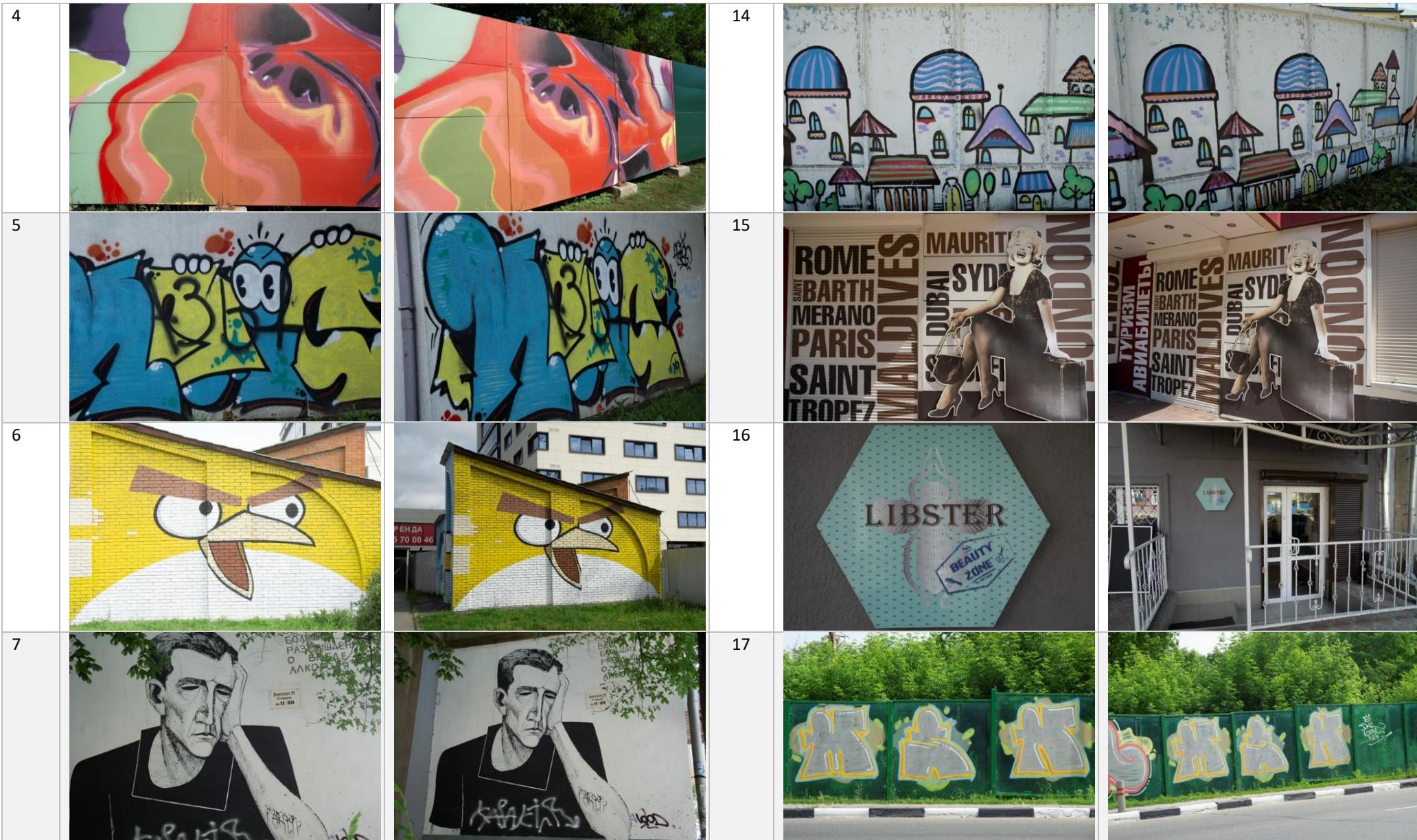


20



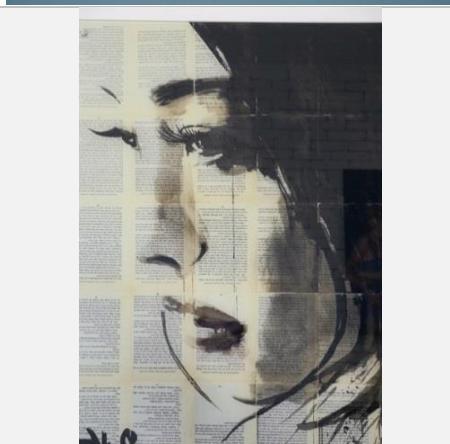
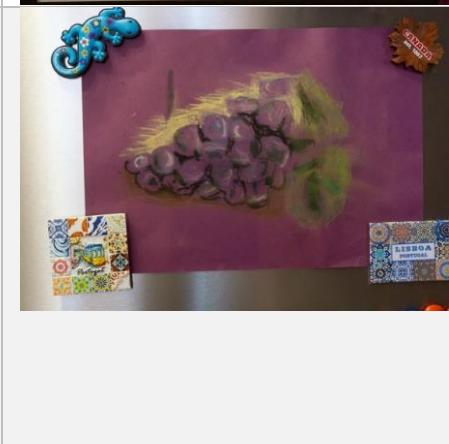
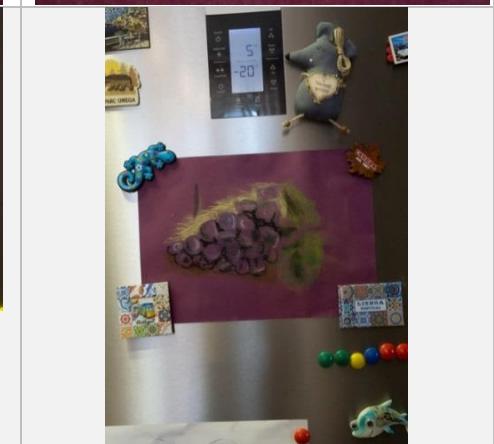
## Picture\_outside subset (20it.)

Pair #	Image pair B <sub>1</sub> : #_0.png		Pair #	Image pair B <sub>1</sub> : #_0.png	
	B <sub>1</sub> : #_0.png	B <sub>2</sub> : #_1.png		B <sub>1</sub> : #_0.png	B <sub>2</sub> : #_1.png
1			11		
2			12		
3			13		





## Picture\_inside subset (20it.)

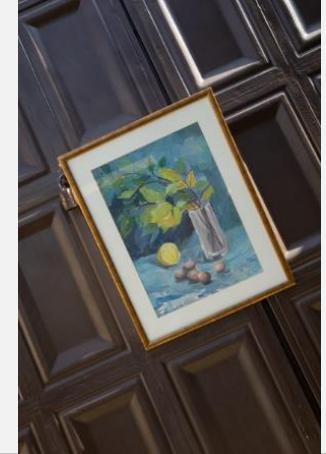
Pair #	Image pair		Pair #	Image pair	
	B <sub>1</sub> : #_0.png	B <sub>2</sub> : #_1.png		B <sub>1</sub> : #_0.png	B <sub>2</sub> : #_1.png
1			11		
2			12		
3			13		

4		14		
5			15	
6			16	

7



17



8



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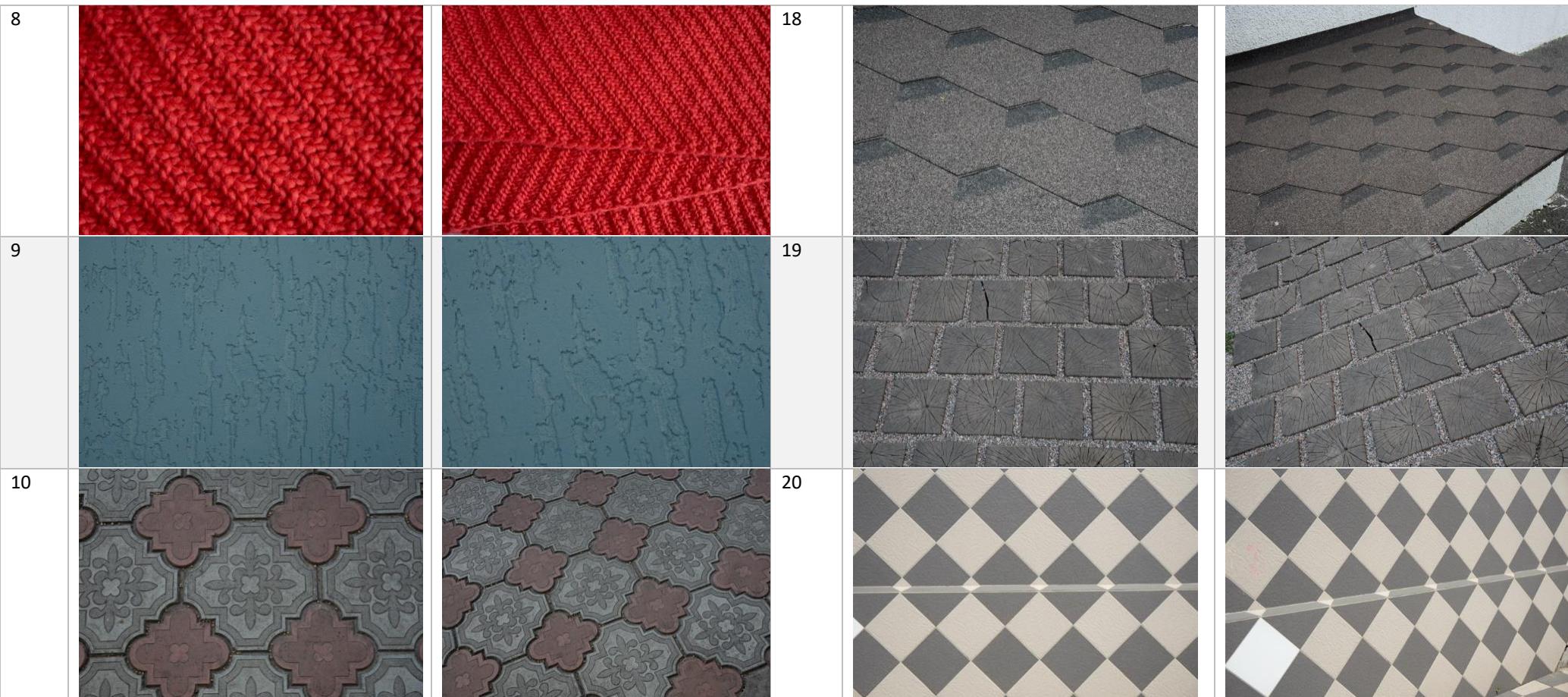
20



## Texture\_artificial subset (20it.)

Pair #	Image pair		Pair #	Image pair	
	B <sub>1</sub> : #_0.png	B <sub>2</sub> : #_1.png		B <sub>1</sub> : #_0.png	B <sub>2</sub> : #_1.png
1			11		
2			12		
3			13		





## **Texture\_nature subset (20it.)**

Pair #	Image pair		Pair #	Image pair	
	B <sub>1</sub> : #_0.png	B <sub>2</sub> : #_1.png		B <sub>1</sub> : #_0.png	B <sub>2</sub> : #_1.png
1			11		
2			12		
3			13		

