

Politecnico di Milano AA 2018 - 2019

Computer Science and Engineering

IMAGE ANALYSIS AND COMPUTER VISION PROJECT

# **BACKGROUND SUBTRACTION**

## Results report:

Webcam: A14 - km. 16,0 Bologna Fiera itinere Sud Threshold = 40 Ratio = 0.85

Andrea Mazzeo - 895579 Daniele Moltisanti - 898977

## **BACKGROUND DETECTION NUMBER 0 WITH THRESHOLD OF 10**

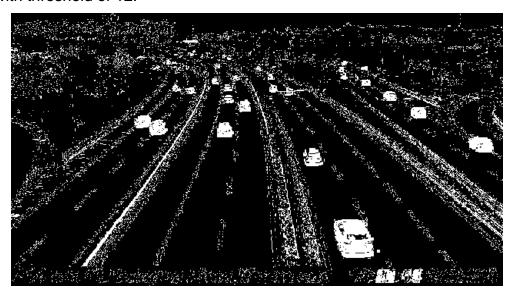
Background detected with accuracy of 87.24%

## Original frame:



## Background detected:





## **BACKGROUND DETECTION NUMBER 1 WITH THRESHOLD OF 10**

Background detected with accuracy of 85.76%

## Original frame:



## Background detected:





## **BACKGROUND DETECTION NUMBER 2 WITH THRESHOLD OF 10**

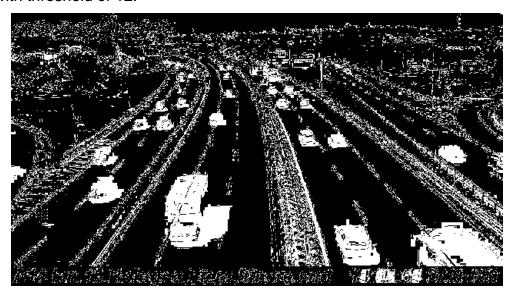
Background detected with accuracy of 77.09%

## Original frame:



## Background detected:





## **BACKGROUND DETECTION NUMBER 3 WITH THRESHOLD OF 10**

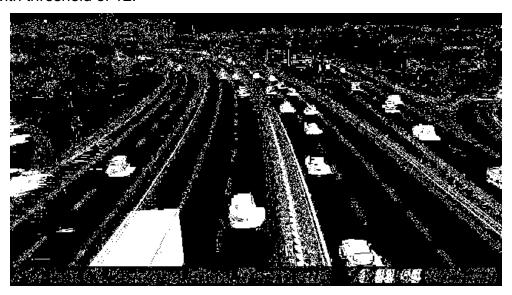
Background detected with accuracy of 81.99%

## Original frame:





Error plotted with threshold of 12:



## **BACKGROUND DETECTION NUMBER 4 WITH THRESHOLD OF 10**

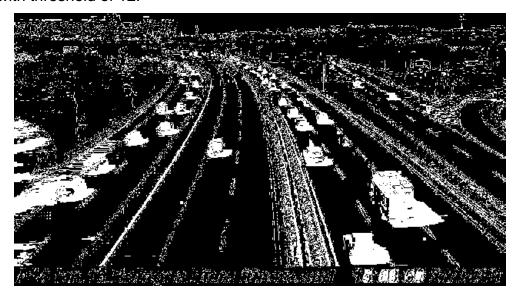
Background detected with accuracy of 79.45%

## Original frame:



## Background detected:





## **BACKGROUND DETECTION NUMBER 5 WITH THRESHOLD OF 10**

Background detected with accuracy of 79.39%

## Original frame:





Error plotted with threshold of 12:



#### **BACKGROUND DETECTION NUMBER 6 WITH THRESHOLD OF 10**

Background detected with accuracy of 76.2%

## Original frame:





Error plotted with threshold of 12:



#### **BACKGROUND DETECTION NUMBER 7 WITH THRESHOLD OF 10**

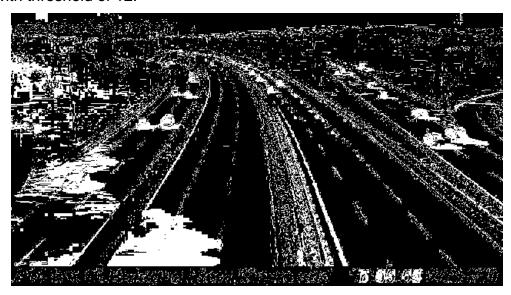
Background detected with accuracy of 78.48%

## Original frame:





Error plotted with threshold of 12:



#### **BACKGROUND DETECTION NUMBER 8 WITH THRESHOLD OF 10**

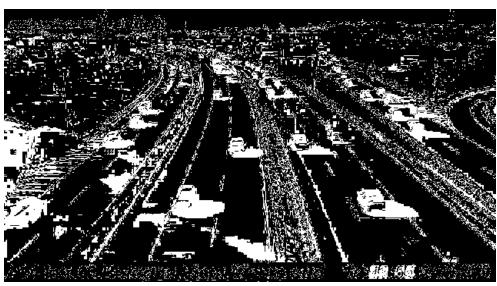
Background detected with accuracy of 76.12%

#### Original frame:





Error plotted with threshold of 12:



#### **BACKGROUND DETECTION NUMBER 9 WITH THRESHOLD OF 10**

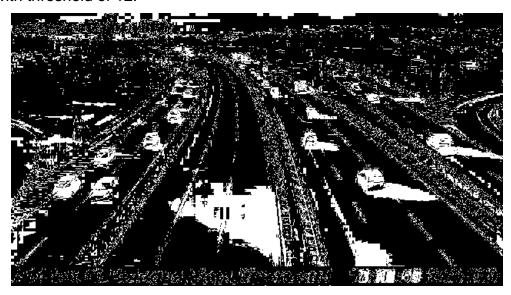
Background detected with accuracy of 76.26%

Original frame:



Background detected:





## **BACKGROUND DETECTION NUMBER 10 WITH THRESHOLD OF 10**

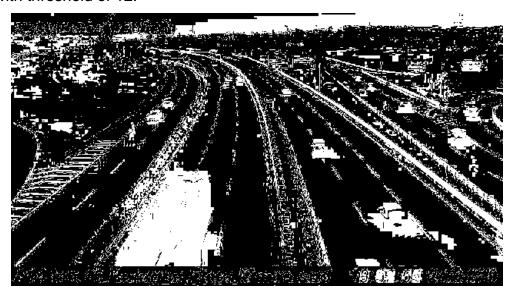
Background detected with accuracy of 70.48%

Original frame:



Background detected:





## **BACKGROUND DETECTION NUMBER 11 WITH THRESHOLD OF 10**

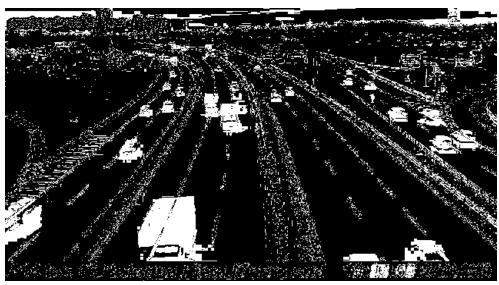
Background detected with accuracy of 81.25%

## Original frame:





Error plotted with threshold of 12:



## **BACKGROUND DETECTION NUMBER 12 WITH THRESHOLD OF 10**

Background detected with accuracy of 11.05%

## Original frame:



## Background detected:





## **BACKGROUND DETECTION NUMBER 13 WITH THRESHOLD OF 10**

Background detected with accuracy of 46.07%

## Original frame:



## Background detected:





## **BACKGROUND DETECTION NUMBER 14 WITH THRESHOLD OF 10**

Background detected with accuracy of 86.01%

Original frame:



Background detected:





#### **BACKGROUND DETECTION NUMBER 15 WITH THRESHOLD OF 10**

Background detected with accuracy of 86.71%

Original frame:



Background detected:





## **BACKGROUND DETECTION NUMBER 16 WITH THRESHOLD OF 10**

Background detected with accuracy of 76.12%

Original frame:



## Background detected:





#### **BACKGROUND DETECTION NUMBER 17 WITH THRESHOLD OF 10**

Background detected with accuracy of 87.29%

Original frame:



Background detected:





## **BACKGROUND DETECTION NUMBER 18 WITH THRESHOLD OF 10**

Background detected with accuracy of 90.06%

## Original frame:





Error plotted with threshold of 12:



## **BACKGROUND DETECTION NUMBER 19 WITH THRESHOLD OF 10**

Background detected with accuracy of 87.85%

Original frame:



Background detected:





#### **BACKGROUND DETECTION NUMBER 20 WITH THRESHOLD OF 10**

Background detected with accuracy of 84.56%

Original frame:



Background detected:





## **BACKGROUND DETECTION NUMBER 21 WITH THRESHOLD OF 10**

Background detected with accuracy of 89.09%

Original frame:



Background detected:





## **BACKGROUND DETECTION NUMBER 22 WITH THRESHOLD OF 10**

Background detected with accuracy of 88.98%

Original frame:



Background detected:





## **BACKGROUND DETECTION NUMBER 23 WITH THRESHOLD OF 10**

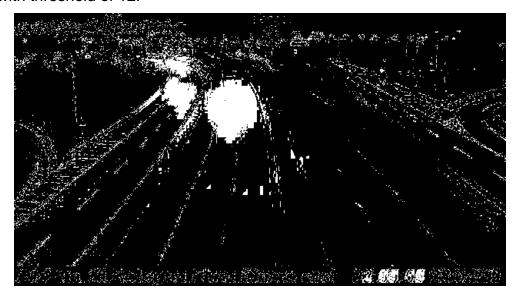
Background detected with accuracy of 90.42%

Original frame:



Background detected:





## **BACKGROUND DETECTION NUMBER 24 WITH THRESHOLD OF 10**

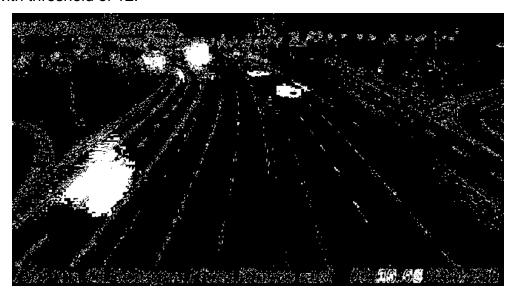
Background detected with accuracy of 91.52%

Original frame:



Background detected:





## **BACKGROUND DETECTION NUMBER 25 WITH THRESHOLD OF 10**

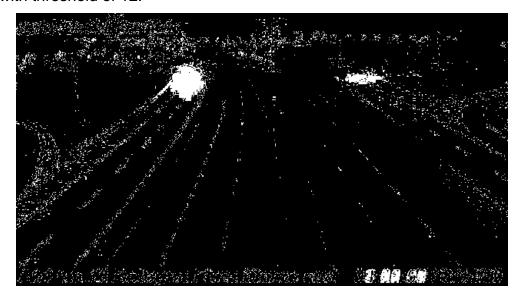
Background detected with accuracy of 94.37%

Original frame:



Background detected:





#### **BACKGROUND DETECTION NUMBER 26 WITH THRESHOLD OF 10**

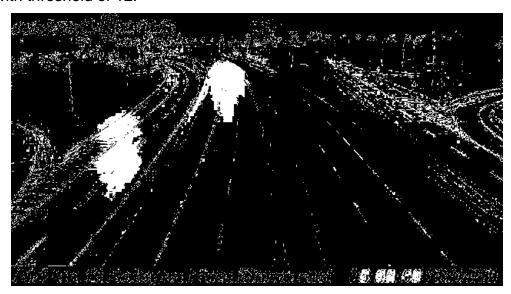
Background detected with accuracy of 88.18%

## Original frame:





Error plotted with threshold of 12:



#### **BACKGROUND DETECTION NUMBER 27 WITH THRESHOLD OF 10**

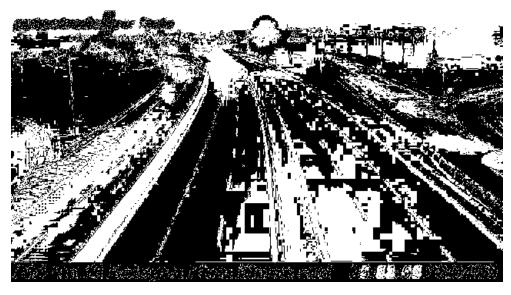
Background detected with accuracy of 50.21%

## Original frame:



## Background detected:





## **BACKGROUND DETECTION NUMBER 28 WITH THRESHOLD OF 10**

Background detected with accuracy of 20.25%

## Original frame:



## Background detected:





## **BACKGROUND DETECTION NUMBER 29 WITH THRESHOLD OF 10**

Background detected with accuracy of 88.93%

Original frame:



Background detected:





## **BACKGROUND DETECTION NUMBER 30 WITH THRESHOLD OF 10**

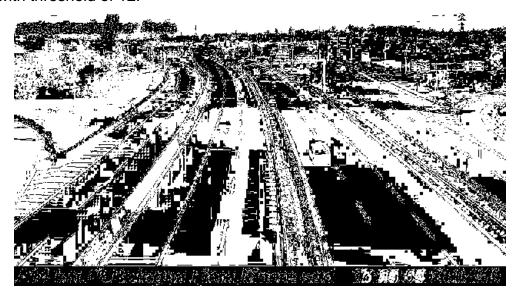
Background detected with accuracy of 41.1%

Original frame:



Background detected:





## **BACKGROUND DETECTION NUMBER 31 WITH THRESHOLD OF 10**

Background detected with accuracy of 81.68%

## Original frame:





Error plotted with threshold of 12:



#### **BACKGROUND DETECTION NUMBER 32 WITH THRESHOLD OF 10**

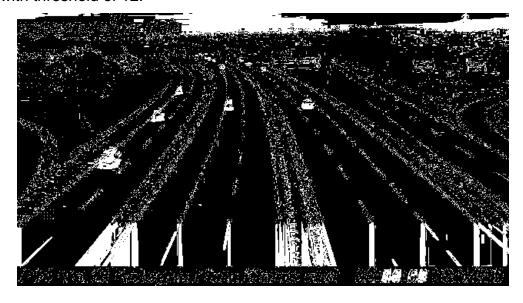
Background detected with accuracy of 83.97%

## Original frame:





Error plotted with threshold of 12:



## **BACKGROUND DETECTION NUMBER 33 WITH THRESHOLD OF 10**

Background detected with accuracy of 65.26%

## Original frame:



## Background detected:





#### **BACKGROUND DETECTION NUMBER 34 WITH THRESHOLD OF 10**

Background detected with accuracy of 80.07%

## Original frame:



## Background detected:





## **BACKGROUND DETECTION NUMBER 35 WITH THRESHOLD OF 10**

Background detected with accuracy of 84.4%

Original frame:



## Background detected:





## **BACKGROUND DETECTION NUMBER 36 WITH THRESHOLD OF 10**

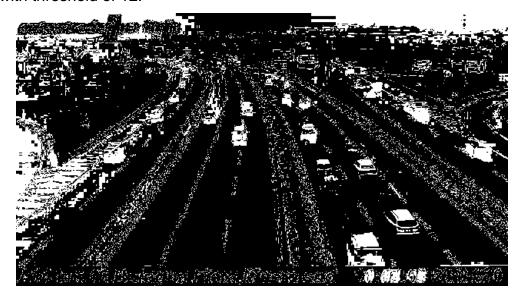
Background detected with accuracy of 78.04%

## Original frame:



## Background detected:





#### **BACKGROUND DETECTION NUMBER 37 WITH THRESHOLD OF 10**

Background detected with accuracy of 64.2%

Original frame:



## Background detected:



