



Politecnico di Milano
AA 2018 - 2019

Computer Science and Engineering

IMAGE ANALYSIS AND COMPUTER VISION PROJECT

BACKGROUND SUBTRACTION

Results report:

Webcam: A04 - km. 149,5 A4/A58 dir Ovest

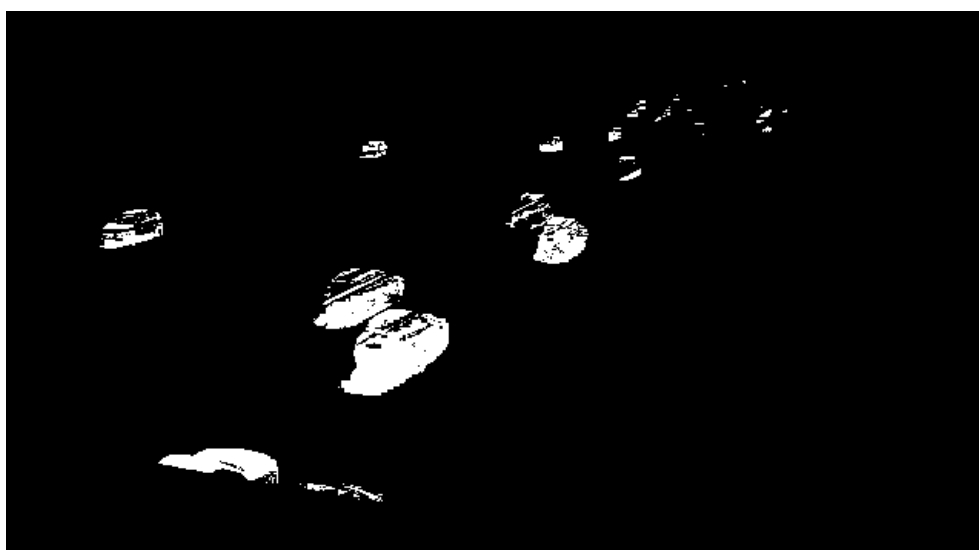
Andrea Mazzeo - 895579
Daniele Moltisanti - 898977

DAILY FRAME

Ground truth:



Model identified:



Results:

True positive	True negative	False positive	False negative
5485	220506	512	2563

Precision: 91.46%

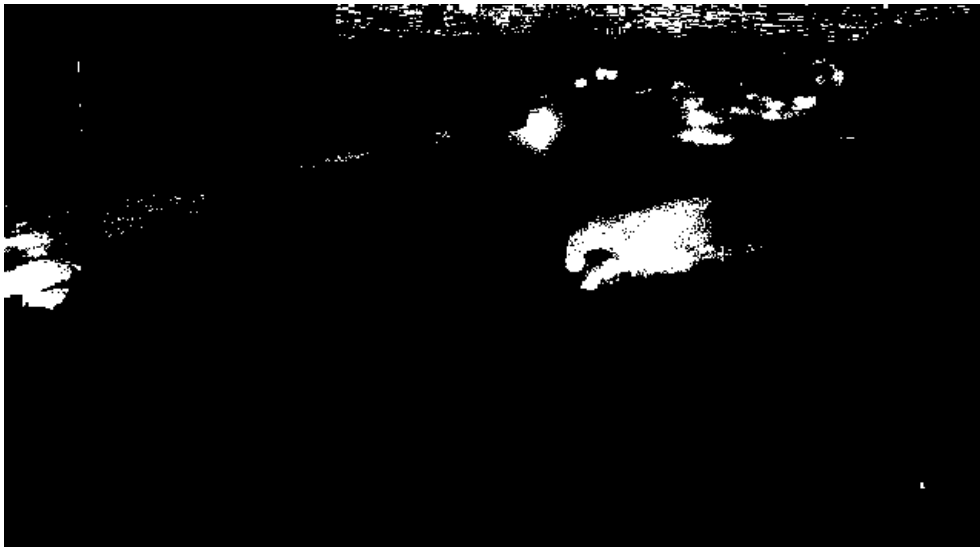
Accuracy: 98.66%

NIGHT FRAME

Ground truth:



Model identified:



Results:

True positive	True negative	False positive	False negative
3349	218934	4266	2773

Precision: 43.98%

Accuracy: 96.93%

MIDDAY BACKGROUND DETECTION

Background detected with accuracy of 72.04% with threshold of 10

Original frame:



Background detected:



Error plotted with threshold of 12:



SUNSET BACKGROUND DETECTION

Background detected with accuracy of 10.72% with threshold of 10

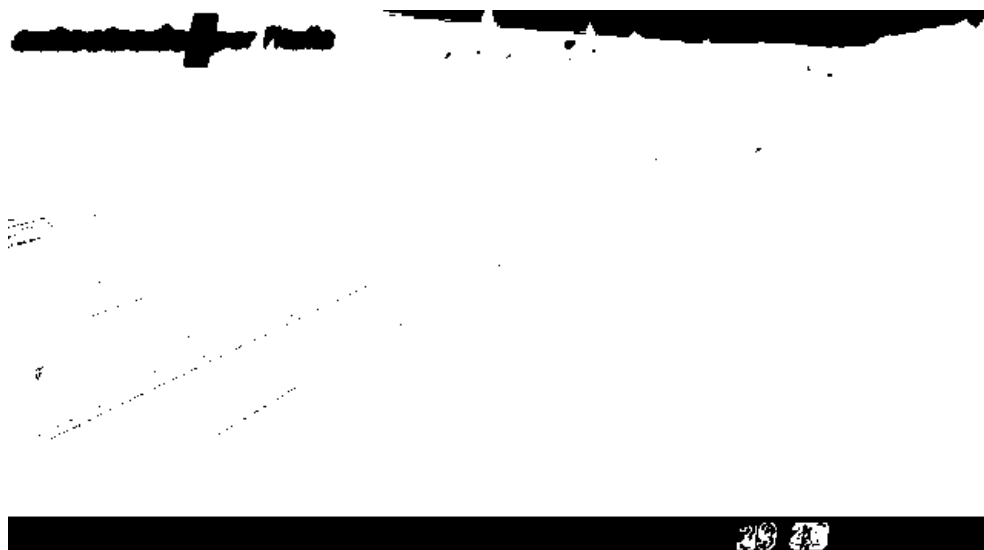
Original frame:



Background detected:



Error plotted with threshold of 12:



MIDNIGHT BACKGROUND DETECTION

Background detected with accuracy of 83.48% with threshold of 10

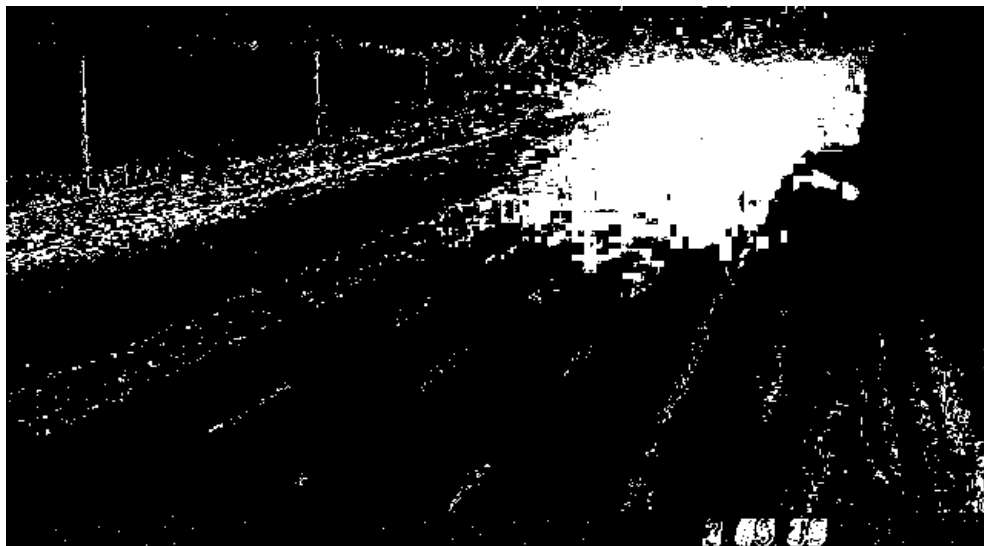
Original frame:



Background detected:



Error plotted with threshold of 12:



SUNRISE BACKGROUND DETECTION

Background detected with accuracy of 93.91% with threshold of 10

Original frame:



Background detected:



Error plotted with threshold of 12:

