



Politecnico di Milano
AA 2018 - 2019

Computer Science and Engineering

IMAGE ANALYSIS AND COMPUTER VISION PROJECT

BACKGROUND SUBTRACTION

Results report:

Webcam: A08 - km. 5,6 - Milano Nord itinere Nord

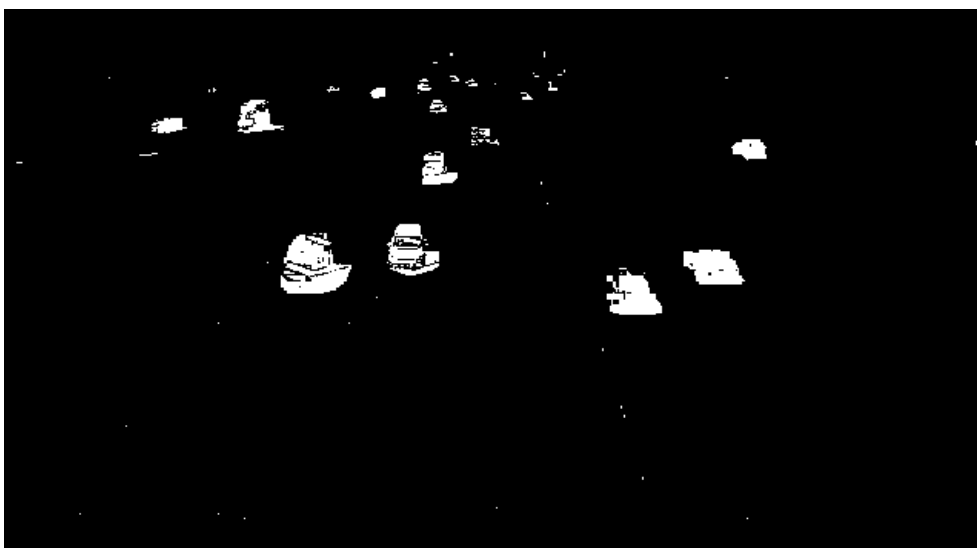
Andrea Mazzeo - 895579
Daniele Moltisanti - 898977

DAILY FRAME

Ground truth:



Model identified:



Results:

True positive	True negative	False positive	False negative
4010	223440	390	1297

Precision: 91.14%

Accuracy: 99.26%

NIGHT FRAME

Ground truth:



Model identified:



Results:

True positive	True negative	False positive	False negative
736	226373	374	1566

Precision: 66.31%

Accuracy: 99.15%

MIDDAY BACKGROUND DETECTION

Background detected with accuracy of 97.24% with threshold of 10

Original frame:



Background detected:



Error plotted with threshold of 12:



SUNSET BACKGROUND DETECTION

Background detected with accuracy of 69.16% with threshold of 10

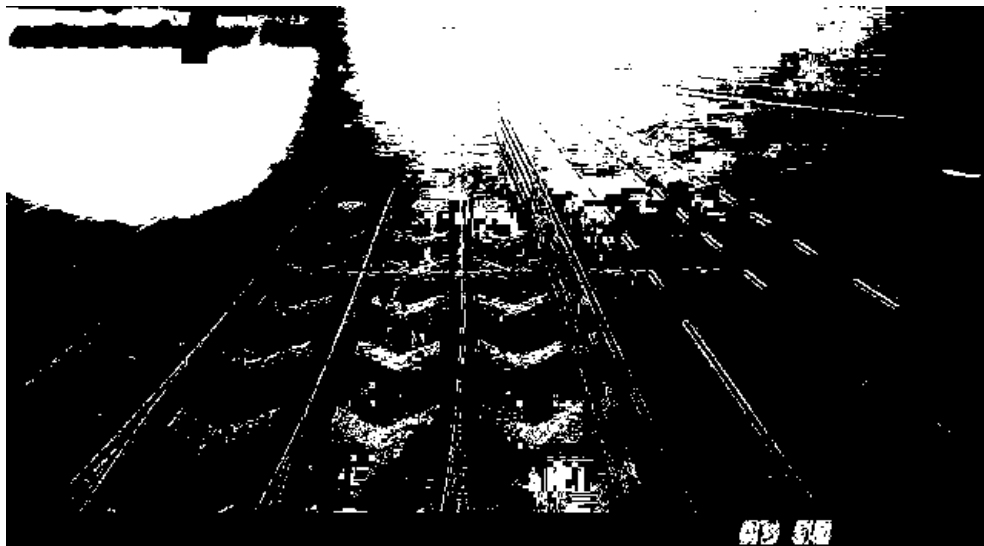
Original frame:



Background detected:



Error plotted with threshold of 12:



MIDNIGHT BACKGROUND DETECTION

Background detected with accuracy of 99.31% with threshold of 10

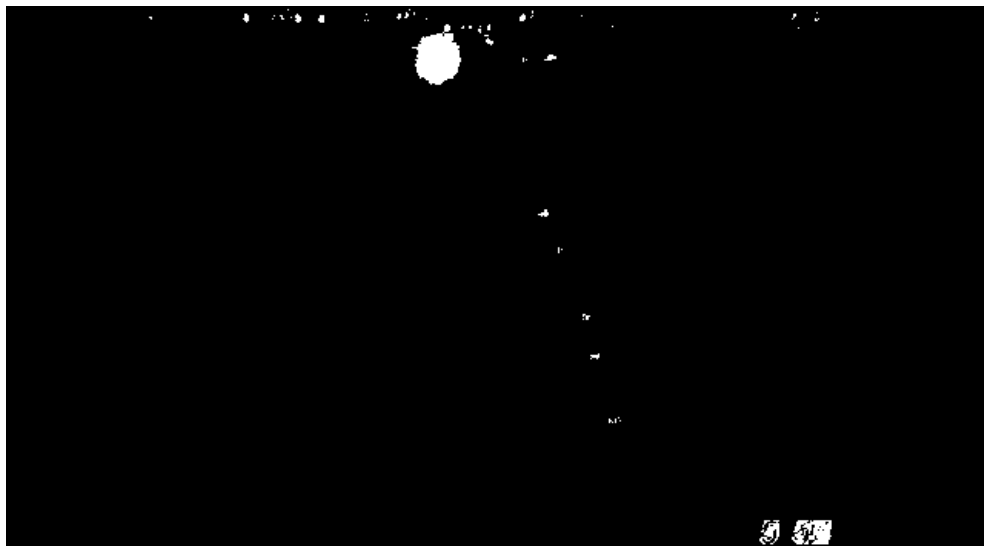
Original frame:



Background detected:



Error plotted with threshold of 12:



SUNRISE BACKGROUND DETECTION

Background detected with accuracy of 8.4% with threshold of 10

Original frame:



Background detected:



Error plotted with threshold of 12:

