



Politecnico di Milano
AA 2018 - 2019

Computer Science and Engineering

IMAGE ANALYSIS AND COMPUTER VISION PROJECT

BACKGROUND SUBTRACTION

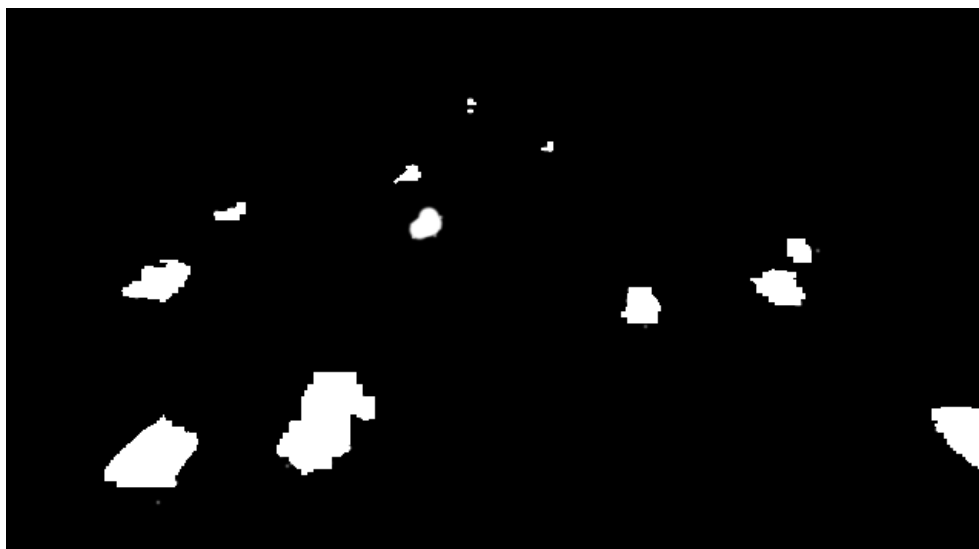
Results report:

Webcam: R14 - km. 2,0 - BO Casalecchio itinere Ovest

Andrea Mazzeo - 895579
Daniele Moltisanti - 898977

DAILY FRAME

Ground truth:



Model identified:



Results:

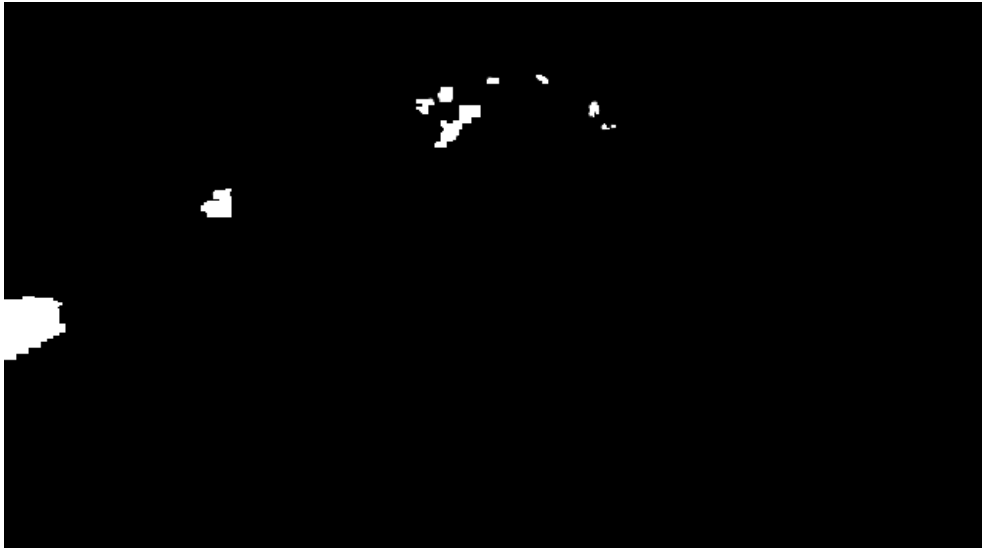
True positive	True negative	False positive	False negative
3444	220447	483	4557

Precision: 87.7%

Accuracy: 97.8%

NIGHT FRAME

Ground truth:



Model identified:



Results:

True positive	True negative	False positive	False negative
928	226730	499	1143

Precision: 65.03%

Accuracy: 99.28%

MIDDAY BACKGROUND DETECTION

Background detected with accuracy of 94.68% with threshold of 10

Original frame:



Background detected:



Error plotted with threshold of 12:



SUNSET BACKGROUND DETECTION

Background detected with accuracy of 8.06% with threshold of 10

Original frame:



Background detected:



Error plotted with threshold of 12:



MIDNIGHT BACKGROUND DETECTION

Background detected with accuracy of 96.84% with threshold of 10

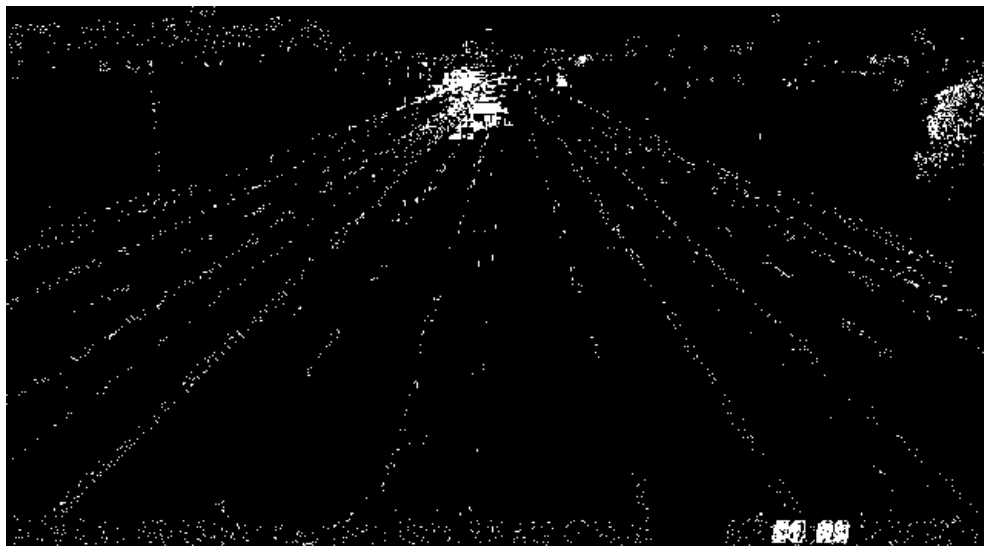
Original frame:



Background detected:



Error plotted with threshold of 12:



SUNRISE BACKGROUND DETECTION

Background detected with accuracy of 84.31% with threshold of 10

Original frame:



Background detected:



Error plotted with threshold of 12:

