



Politecnico di Milano
AA 2018 - 2019

Computer Science and Engineering

IMAGE ANALYSIS AND COMPUTER VISION PROJECT

BACKGROUND SUBTRACTION

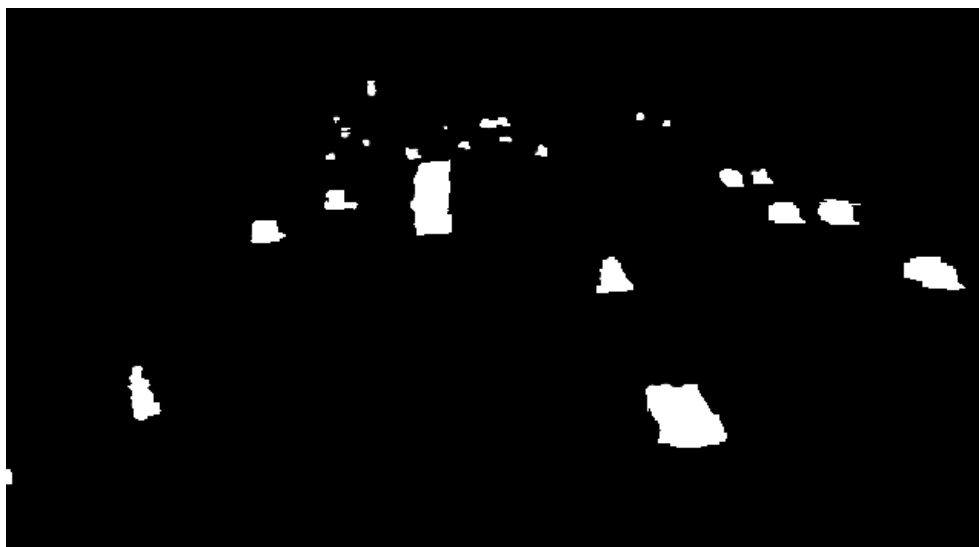
Results report:

Webcam: A14 - km. 16,0 Bologna Fiera itinere Sud

Andrea Mazzeo - 895579
Daniele Moltisanti - 898977

DAILY FRAME

Ground truth:



Model identified:



Results:

True positive	True negative	False positive	False negative
3770	221671	1649	2031

Precision: 69.57%

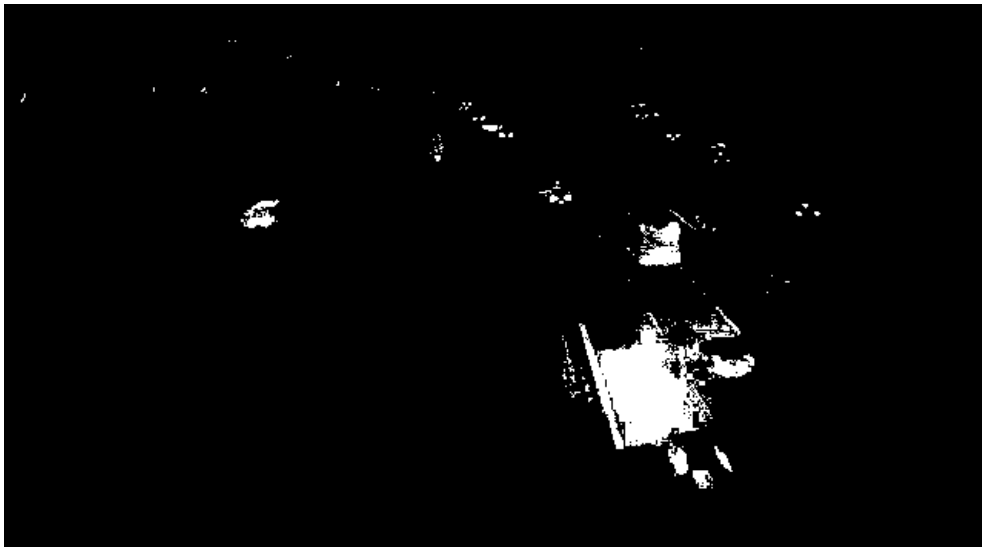
Accuracy: 98.39%

NIGHT FRAME

Ground truth:



Model identified:



Results:

True positive	True negative	False positive	False negative
1451	220330	4328	3005

Precision: 25.11%

Accuracy: 96.8%

MIDDAY BACKGROUND DETECTION

Background detected with accuracy of 95.7% with threshold of 10

Original frame:



Background detected:



Error plotted with threshold of 12:



SUNSET BACKGROUND DETECTION

Background detected with accuracy of 89.1% with threshold of 10

Original frame:



Background detected:



Error plotted with threshold of 12:



MIDNIGHT BACKGROUND DETECTION

Background detected with accuracy of 98.93% with threshold of 10

Original frame:



Background detected:



Error plotted with threshold of 12:



SUNRISE BACKGROUND DETECTION

Background detected with accuracy of 12.72% with threshold of 10

Original frame:



Background detected:



Error plotted with threshold of 12:

