

PROJECT DEVELOPMENT PHASE

SPRINT - 3

Date	18 NOVEMBER 2022
Team ID	PNT2022TMID26760
Project Name	Project-VirtualEye-Lifeguard for Swimming Pools to Detect Active Drowning

```
# Testing
# batch=1
# subdivisions=1 #
Training batch=64
subdivisions=16
width=608
height=608
channels=3
momentum=0.9
decay=0.0005
angle=0
saturation = 1.5
exposure = 1.5
hue=.1
learning_rate=0.0
1 burn_in=1000
max_batches =
500200
policy=steps
steps=400000,450
000 scales=.1,.1
[convolutional]
batch_normalize=
1 filters=32 size=3
stride=1 pad=1
activation=leaky
# Downsample
[convolutional]
batch_normaliz
e=1 filters=64
```

size=3 stride=2
pad=1
activation=leaky
[convolutional]
batch_normalization=1 filters=32
size=1 stride=1
pad=1
activation=leaky
[convolutional]
batch_normalization=1 filters=64
size=3 stride=1
pad=1
activation=leaky
[shortcut]
from=-3
activation=linear
Downsample
[convolutional]
batch_normalization=1 filters=128
size=3 stride=2
pad=1
activation=leaky
[convolutional]
batch_normalization=1 filters=64
size=1 stride=1
pad=1
activation=leaky
[convolutional]
batch_normalization=1 filters=128
size=3 stride=1

```
pad=1
activation=leaky [shortcut]
from=-3
activation=linear
[convolutional]
batch_normalization=1 filters=64
size=1 stride=1
pad=1
activation=leaky
[convolutional]
batch_normalization=1 filters=128
size=3 stride=1
pad=1
activation=leaky [shortcut]
from=-3
activation=linear
# Downsample
[convolutional]
batch_normalization=1 filters=256
size=3 stride=2
pad=1
activation=leaky
[convolutional]
batch_normalization=1 filters=128
size=1 stride=1
pad=1
activation=leaky
[convolutional]
batch_normalization=1
```

e=1 filters=256
size=3 stride=1
pad=1
activation=leaky [shortcut]
from=-3
activation=linear
[convolutional]
batch_normalization
e=1 filters=128
size=1 stride=1
pad=1
activation=leaky
[convolutional]
batch_normalization
e=1 filters=256
size=3 stride=1
pad=1
activation=leaky [shortcut]
from=-3
activation=linear
[convolutional]
batch_normalization
e=1 filters=128
size=1 stride=1
pad=1
activation=leaky
[convolutional]
batch_normalization
e=1 filters=256
size=3
stride=1 pad=1
activation=leaky [shortcut]
from=-3

activation=line
ar
[convolutional]
batch_normaliz
e=1 filters=128
size=1 stride=1
pad=1
activation=leak
y
[convolutional]
batch_normaliz
e=1 filters=256
size=3 stride=1
pad=1
activation=leak
y [shortcut]
from=-3
activation=line
ar
[convolutional]
batch_normaliz
e=1 filters=128
size=1 stride=1
pad=1
activation=leak
y
[convolutional]
batch_normaliz
e=1 filters=256
size=3 stride=1
pad=1
activation=leak
y [shortcut]
from=-3
activation=line
ar
[convolutional]
batch_normaliz
e=1 filters=128
size=1 stride=1

pad=1
activation=leaky
y
[convolutional]
batch_normaliz
e=1 filters=256
size=3 stride=1
pad=1
activation=leaky
y [shortcut]
from=-3
activation=linear
ar
[convolutional]
batch_normaliz
e=1 filters=128
size=1 stride=1
pad=1
activation=leaky
y
[convolutional]
batch_normaliz
e=1 filters=256
size=3 stride=1
pad=1
activation=leaky
y [shortcut]
from=-3
activation=linear
ar
[convolutional]
batch_normaliz
e=1 filters=128
size=1 stride=1
pad=1
activation=leaky
y
[convolutional]
batch_normaliz
e=1 filters=256

```
size=3 stride=1
pad=1
activation=leak
y [shortcut]
from=-3
activation=line
ar
# Downsample
[convolutional]
batch_normaliz
e=1 filters=512
size=3 stride=2
pad=1
activation=leak
y
[convolutional]
batch_normaliz
e=1 filters=256
size=1 stride=1
pad=1
activation=leak
y
[convolutional]
batch_normaliz
e=1 filters=512
size=3 stride=1
pad=1
activation=leak
y [shortcut]
from=-3
activation=line
ar
[convolutional]
batch_normaliz
e=1 filters=256
size=1 stride=1
pad=1
activation=leak
y
[convolutional]
```

batch_normaliz
e=1 filters=512
size=3 stride=1
pad=1
activation=leak
y [shortcut]
from=-3
activation=line
ar
[convolutional]
batch_normaliz
e=1 filters=256
size=1 stride=1
pad=1
activation=leak
y
[convolutional]
batch_normaliz
e=1 filters=512
size=3 stride=1
pad=1
activation=leak
y [shortcut]
from=-3
activation=line
ar
[convolutional]
batch_normaliz
e=1 filters=256
size=1 stride=1
pad=1
activation=leak
y
[convolutional]
batch_normaliz
e=1 filters=512
size=3 stride=1
pad=1
activation=leak
y [shortcut]


```
from=-3
activation=line
ar
[convolutional]
batch_normaliz
e=1 filters=256
size=1 stride=1
pad=1
activation=leak
y
[convolutional]
batch_normaliz
e=1 filters=512
size=3 stride=1
pad=1
activation=leak
y [shortcut]
from=-3
activation=line
ar
[convolutional]
batch_normaliz
e=1 filters=256
size=1 stride=1
pad=1
activation=leak
y
[convolutional]
batch_normaliz
e=1 filters=512
size=3 stride=1
pad=1
activation=leak
y [shortcut]
from=-3
activation=line
ar
[convolutional]
batch_normaliz
e=1 filters=256
```

```
size=1 stride=1
pad=1
activation=leaky
[convolutional]
batch_normaliz
e=1 filters=512
size=3 stride=1
pad=1
activation=leaky [shortcut]
from=-3
activation=linear
[convolutional]
batch_normaliz
e=1 filters=256
size=1 stride=1
pad=1
activation=leaky
[convolutional]
batch_normaliz
e=1 filters=512
size=3 stride=1
pad=1
activation=leaky [shortcut]
from=-3
activation=linear
# Downsample
[convolutional]
batch_normaliz
e=1
filters=1024
size=3
stride=2 pad=1
activation=leaky
```

[convolutional]
batch_normaliz
e=1 filters=512
size=1 stride=1
pad=1
activation=leak
y
[convolutional]
batch_normaliz
e=1
filters=1024
size=3 stride=1
pad=1
activation=leak
y [shortcut]
from=-3
activation=line
ar
[convolutional]
batch_normaliz
e=1 filters=512
size=1 stride=1
pad=1
activation=leak
y
[convolutional]
batch_normaliz
e=1
filters=1024
size=3 stride=1
pad=1
activation=leak
y [shortcut]
from=-3
activation=line
ar
[convolutional]
batch_normaliz
e=1 filters=512
size=1 stride=1

```
pad=1
activation=leak
y
[convolutional]
batch_normaliz
e=1
filters=1024
size=3 stride=1
pad=1
activation=leak
y [shortcut]
from=-3
activation=line
ar
[convolutional]
batch_normaliz
e=1 filters=512
size=1 stride=1
pad=1
activation=leak
y
[convolutional]
batch_normaliz
e=1
filters=1024
size=3 stride=1
pad=1
activation=leak
y [shortcut]
from=-3
activation=line
ar
#####
[convolutional]
batch_normaliz
e=1 filters=512
size=1 stride=1
pad=1
activation=leak
y
```

[convolutional]
batch_normaliz
e=1 size=3
stride=1 pad=1
filters=1024
activation=leak
y

[convolutional]
batch_normaliz
e=1 filters=512
size=1 stride=1
pad=1
activation=leak
y

[convolutional]
batch_normaliz
e=1 size=3
stride=1 pad=1
filters=1024
activation=leak
y

[convolutional]
batch_normaliz
e=1 filters=512
size=1 stride=1
pad=1
activation=leak
y

[convolutional]
batch_normaliz
e=1 size=3
stride=1 pad=1
filters=1024
activation=leak
y

[convolutional]
size=1 stride=1

```
pad=1
filters=255
activation=line
ar
```

```
[yolo]
mask =
6,7,8
anchors = 10,13, 16,30, 33,23, 30,61, 62,45, 59,119,
116,90,
156,198,
373,326
classes=80
num=9 jitter=.3
ignore_thresh =
.7 truth_thresh =
1 random=1
```

```
[route]
layers = -
4
```

```
[convolutional]
batch_normaliz
e=1 filters=256
size=1 stride=1
pad=1
activation=leak
y
```

```
[upsample]
stride=2
[route] layers
= -1, 61
```

```
[convolutional]
batch_normaliz
e=1 filters=256
size=1 stride=1
```

pad=1
activation=leak
y
[convolutional]
batch_normaliz
e=1 size=3
stride=1 pad=1
filters=512
activation=leak
y
[convolutional]
batch_normaliz
e=1 filters=256
size=1 stride=1
pad=1
activation=leak
y
[convolutional]
batch_normaliz
e=1 size=3
stride=1 pad=1
filters=512
activation=leak
y
[convolutional]
batch_normaliz
e=1 filters=256
size=1 stride=1
pad=1
activation=leak
y
[convolutional]
batch_normaliz
e=1 size=3
stride=1 pad=1
filters=512
activation=leak
y
[convolutional]
size=1 stride=1

```
pad=1
filters=255
activation=line
ar
[yolo]
mask =
3,4,5
anchors =
10,13,
16,30,
33,23,
30,61,
62,45,
59,119,
116,90,
156,198,
373,326
classes=80
num=9 jitter=.3
ignore_thresh =
.7 truth_thresh =
1 random=1
```

```
[route]
layers = -
4
```

```
[convolutional]
batch_normaliz
e=1 filters=128
size=1 stride=1
pad=1
activation=leak
y
[upsample]
stride=2
[route] layers
= -1, 36
```


[convolutional]
batch_normaliz
e=1 filters=128
size=1 stride=1
pad=1
activation=leak
y

[convolutional]
batch_normaliz
e=1 size=3
stride=1 pad=1
filters=256
activation=leak
y

[convolutional]
batch_normaliz
e=1 filters=128
size=1 stride=1
pad=1
activation=leak
y

[convolutional]
batch_normaliz
e=1 size=3
stride=1
pad=1
filters=256
activation=leak
y

[convolutional]
batch_normaliz
e=1 filters=128
size=1 stride=1
pad=1

activation=leaky

[convolutional]
batch_normaliz
e=1 size=3
stride=1 pad=1
filters=256
activation=leaky

[convolutional]
size=1 stride=1
pad=1
filters=255
activation=linear

[yolo]
mask =
0,1,2
anchors = 10,13, 16,30, 33,23, 30,61, 62,45, 59,119,
116,90,
156,198,
373,326
classes=80
num=9 jitter=.3
ignore_thresh =
.7 truth_thresh =
1 random=1