

PROJECT DEVELOPMENT PHASE
SPRINT - 3

Date	16 November 2022
Team ID	PNT2022TMID39919
Project Name	Project -VirtualEye - Life Guard 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=leak
y
[convolutional]
batch_normaliz e=1
filters=32 size=1
stride=1 pad=1
activation=leak
y
[convolutional]
batch_normaliz
e=1 filters=64
size=3 stride=1
pad=1
activation=leak y
[shortcut] from=-
3
activation=line
ar #
Downsample
[convolutional]
batch_normaliz
e=1 filters=128
size=3 stride=2
pad=1
activation=leak
y
[convolutional]
batch_normaliz e=1
filters=64 size=1
stride=1 pad=1
activation=leak
y
[convolutional]
batch_normaliz e=1
filters=128 size=3
stride=1 pad=1
activation=leak y
```

```
[shortcut] from=-3
activation=line ar
[convolutional]
batch_normaliz e=1
filters=64 size=1
stride=1 pad=1
activation=leak
y
[convolutional]
batch_normaliz
e=1 filters=128
size=3 stride=1
pad=1
activation=leak y
[shortcut] from=-
3 activation=line
ar #
Downsample
[convolutional]
batch_normaliz
e=1 filters=256
size=3 stride=2
pad=1
activation=leak y
[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=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=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=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 #
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=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
# Downsample
[convolutional]
batch_normaliz
e=1 filters=1024
size=3 stride=2
```

pad=1
activation=leak
y

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

size=1 stride=1

pad=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=linear

[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=leaky

[upsample]

stride=2

[route] layers

= -1, 61

[convolutional]

batch_normaliz

e=1 filters=256

activation=leak

y

[convolutional]

batch_normaliz

e=1 size=3

size=1 stride=1

pad=1

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] filters=255 activation=line

ar [yolo]

mask =

3,4,5

anchors =

10,13,

16,30,

size=1 stride=1

pad=1
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=leak y

[convolutional]
batch_normaliz
e=1 size=3

```
stride=1 pad=1
filters=256
activation=leak
y
[convolutional]
size=1 stride=1
pad=1
filters=255
activation=line
ar
[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
```