SPRINT - 3

DATE	9 November 2022
TEAM ID	PNT2022TMID25952
PROJECT NAME	Virtual Eye - LifeGuard For Swimming Pools To Detect
MAXIMUM MARKS	8 MARKS

```
[Net]
# 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=0.01
burn_in=1000
max batches = 500200
policy=steps
steps=400000,450000
scales=.1,.1
[convolutional]
batch normalize=1
filters=32 size=3
stride=1 pad=1
activation=leaky
# Downsample
[convolutional]
batch normalize=1
filters=64 size=3
stride=2 pad=1
activation=leaky
[convolutional]
batch_normalize=1
filters=32 size=1
stride=1 pad=1
activation=leaky
[convolutional]
batch normalize=1
filters=64 size=3
stride=1 pad=1
```

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

```
size=3 stride=1
pad=1
activation=leaky
[shortcut] from=-
activation=linear
[convolutional]
batch normalize=1
filters=128
size=1 stride=1
pad=1
activation=leaky
[convolutional]
batch normalize=1
filters=256
size=3 stride=1
pad=1
activation=leaky
[shortcut] from=-
activation=linear
[convolutional]
batch normalize=1
filters=128
size=1 stride=1
pad=1
activation=leaky
[convolutional]
batch normalize=1
filters=256
size=3
stride=1 pad=1
activation=leaky
[shortcut] from=-
3
activation=linear
[convolutional]
batch normalize=1
filters=128
size=1 stride=1
pad=1
activation=leaky
[convolutional]
batch normalize=1
filters=256
size=3 stride=1
pad=1
activation=leaky
[shortcut] from=-
activation=linear
[convolutional]
batch normalize=1
filters=128
size=1 stride=1
```

```
pad=1
activation=leaky
[convolutional]
batch normalize=1
filters=256
size=3 stride=1
pad=1
activation=leaky
[shortcut] from=-
activation=linear
[convolutional]
batch normalize=1
filters=128
size=1 stride=1
pad=1
activation=leaky
[convolutional]
batch normalize=1
filters=256
size=3 stride=1
pad=1
activation=leaky
[shortcut] from=-
activation=linear
[convolutional]
batch normalize=1
filters=128
size=1 stride=1
pad=1
activation=leaky
[convolutional]
batch normalize=1
filters=256
size=3 stride=1
pad=1
activation=leaky
[shortcut] from=-
3
activation=linear
[convolutional]
batch normalize=1
filters=128
size=1 stride=1
pad=1
activation=leaky
[convolutional]
batch_normalize=1
filters=256
size=3 stride=1
pad=1
activation=leaky
[shortcut] from=-
```

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

```
[convolutional]
batch normalize=1
filters=256
size=1 stride=1
pad=1
activation=leaky
[convolutional]
batch normalize=1
filters=512
size=3 stride=1
pad=1
activation=leaky
[shortcut] from=-
activation=linear
[convolutional]
batch normalize=1
filters=256
size=1 stride=1
pad=1
activation=leaky
[convolutional]
batch normalize=1
filters=512
size=3 stride=1
pad=1
activation=leaky
[shortcut] from=-
activation=linear
[convolutional]
batch normalize=1
filters=256
size=1 stride=1
pad=1
activation=leaky
[convolutional]
batch normalize=1
filters=512
size=3 stride=1
pad=1
activation=leaky
[shortcut] from=-
3
activation=linear
[convolutional]
batch normalize=1
filters=256
size=1 stride=1
pad=1
activation=leaky
[convolutional]
batch normalize=1
filters=512
size=3 stride=1
```

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

```
3
activation=linear
[convolutional]
batch normalize=1
filters=512
size=1 stride=1
pad=1
activation=leaky
[convolutional]
batch normalize=1
filters=1024
size=3 stride=1
pad=1
activation=leaky
[shortcut] from=-
activation=linear
[convolutional]
batch normalize=1
filters=512
size=1 stride=1
pad=1
activation=leaky
[convolutional]
batch normalize=1
filters=1024
size=3 stride=1
pad=1
activation=leaky
[shortcut] from=-
activation=linear
#######################
[convolutional]
batch normalize=1
filters=512
size=1 stride=1
pad=1
activation=leaky
[convolutional]
batch normalize=1
size=3 stride=1
pad=1
filters=1024
activation=leaky
[convolutional]
batch normalize=1
filters=512
size=1 stride=1
pad=1
activation=leaky
[convolutional]
batch normalize=1
size=3 stride=1
pad=1
```

```
filters=1024
activation=leaky
[convolutional]
batch normalize=1
filters=512
size=1 stride=1
pad=1
activation=leaky
[convolutional]
batch normalize=1
size=3 stride=1
pad=1
filters=1024
activation=leaky
[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 normalize=1
filters=256
size=1 stride=1
pad=1
activation=leaky
[upsample]
stride=2
[route] layers
= -1, 61
[convolutional]
batch normalize=1
filters=256
size=1 stride=1
pad=1
activation=leaky
```

[convolutional]

```
batch normalize=1
size=3 stride=1
pad=1 filters=512
activation=leaky
[convolutional]
batch normalize=1
filters=256
size=1 stride=1
pad=1
activation=leaky
[convolutional]
batch normalize=1
size=3 stride=1
pad=1 filters=512
activation=leaky
[convolutional]
batch normalize=1
filters=256
size=1 stride=1
pad=1
activation=leaky
[convolutional]
batch normalize=1
size=3 stride=1
pad=1 filters=512
activation=leaky
[convolutional]
size=1 stride=1
pad=1 filters=255
activation=linear
[yolo] mask
= 3, 4, 5
anchors =
10,13,
16,30,
33,23,
30,61,
62,45,
59,119,
116,90,
          373,326
156,198,
classes=80 num=9
jitter=.3
ignore thresh = .7
truth thresh = 1
random=1
 [route]
layers = -4
[convolutional]
batch normalize=1
filters=128
```

size=1 stride=1
pad=1
activation=leaky
 [upsample]
stride=2
[route] layers
= -1, 36

[convolutional]
batch_normalize=1
filters=128
size=1 stride=1
pad=1
activation=leaky

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

[convolutional]
batch_normalize=1
filters=128
size=1 stride=1
pad=1
activation=leaky

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

[convolutional]
batch_normalize=1
filters=128
size=1 stride=1
pad=1
activation=leaky

[convolutional]
batch_normalize=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
```