

# Experiment Report

Start of automated test report 2023-04-14 12:49:50

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## Machine Information

sysname=Linux

nodename=workstation

release=5.19.0-38-generic

version=#39~22.04.1-Ubuntu SMP PREEMPT\_DYNAMIC Fri Mar 17 21:16:15 UTC 2

machine=x86\_64

CPU arch : X86\_64

CPU bits : 64

CPU brand : Intel(R) Core(TM) i7-10700K CPU @ 3.80GHz

CPU cores : 8

CPU base clock : 3.8000 GHz

CPU boost clock : 3.7920 GHz

System Memory : 31.35GB

Nvidia driver version : 525.105.17

Device 0 : NVIDIA GeForce GTX 1080

Device 0 : 8.0GB

## Library Information

python : 3.8.16

torch : 1.13.1+cu117

optuna : 3.1.0

numpy : 1.23.3

pandas : 1.5.3

matplotlib : 3.7.1

seaborn : 0.12.2

pcb library: generation of .pcb files.

Library version : 0.0.12

Library built with : C++14

Library built on : Mar 3 2023 23:10:31

netlist\_graph: Graph pre-processing library for PCB component placement.

Library version : 0.1.16

Library built with : C++14

Library built on : Mar 3 2023 23:10:32

## Hyperparameters

/home/luke/work/rl\_pcb/tests/02\_training\_td3\_cuda/hyperparameters/hp\_td3.json

learning\_rate:0.001

buffer\_size:25000

n\_steps:2048

batch\_size:128

gamma:0.99

net\_arch: {'pi': [400, 300], 'qf': [400, 300]}

activation\_fn:relu

expl\_noise:0.1

tau:0.005

policy\_noise:0.2

noise\_clip:0.5

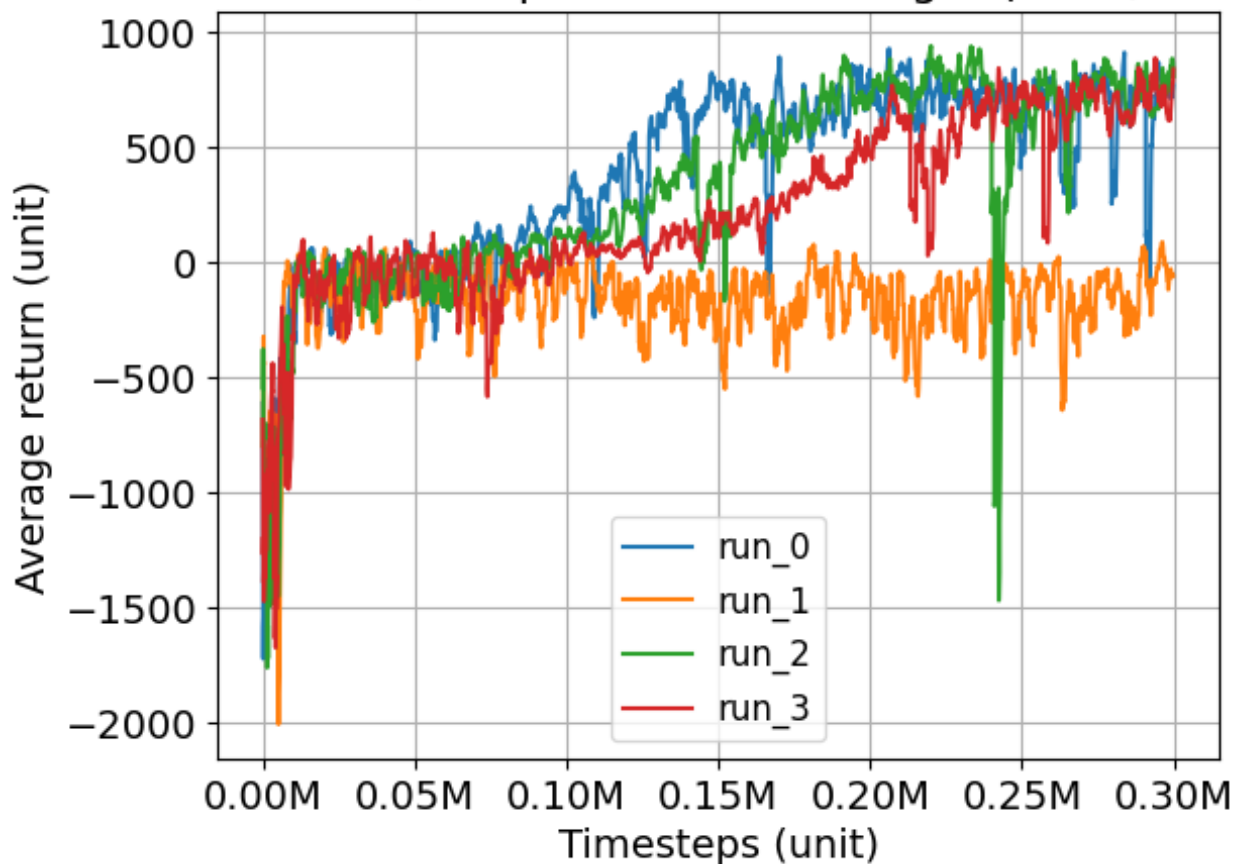
policy\_freq:2

```

experiment=01_training_td3_cuda_622
experiments=['training_td3_cuda_622']
algorithms=['TD3']
averaging window=10 (user assigned)

```

Parameter test w/ emphasis on wirelength (W=6, H=2, O=2)



title	td3_cuda_622:TD3
run #0	662.0384 ± 504.2233
run #1	-148.4519 ± 374.5195
run #2	550.5098 ± 695.5363
run #3	683.8391 ± 314.0354
mean	436.9838 ± 472.0786

```

runs_involved=['1681372339_0', '1681372339_1', '1681372339_2',
'1681372339_3']

```

End of automated test report 2023-04-14 12:49:51