

# Experiment Report

Start of automated test report 2023-04-14 12:49:43

Author=UNKNOWN@workstation obo Luke Vassallo

## 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/04\_training\_sac\_cuda/hyperparameters/hp\_sac.json

learning\_rate:0.0003

buffer\_size:25000

n\_steps:2048

batch\_size:256

gamma:0.99

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

activation\_fn:relu

expl\_noise:0.1

tau:0.005

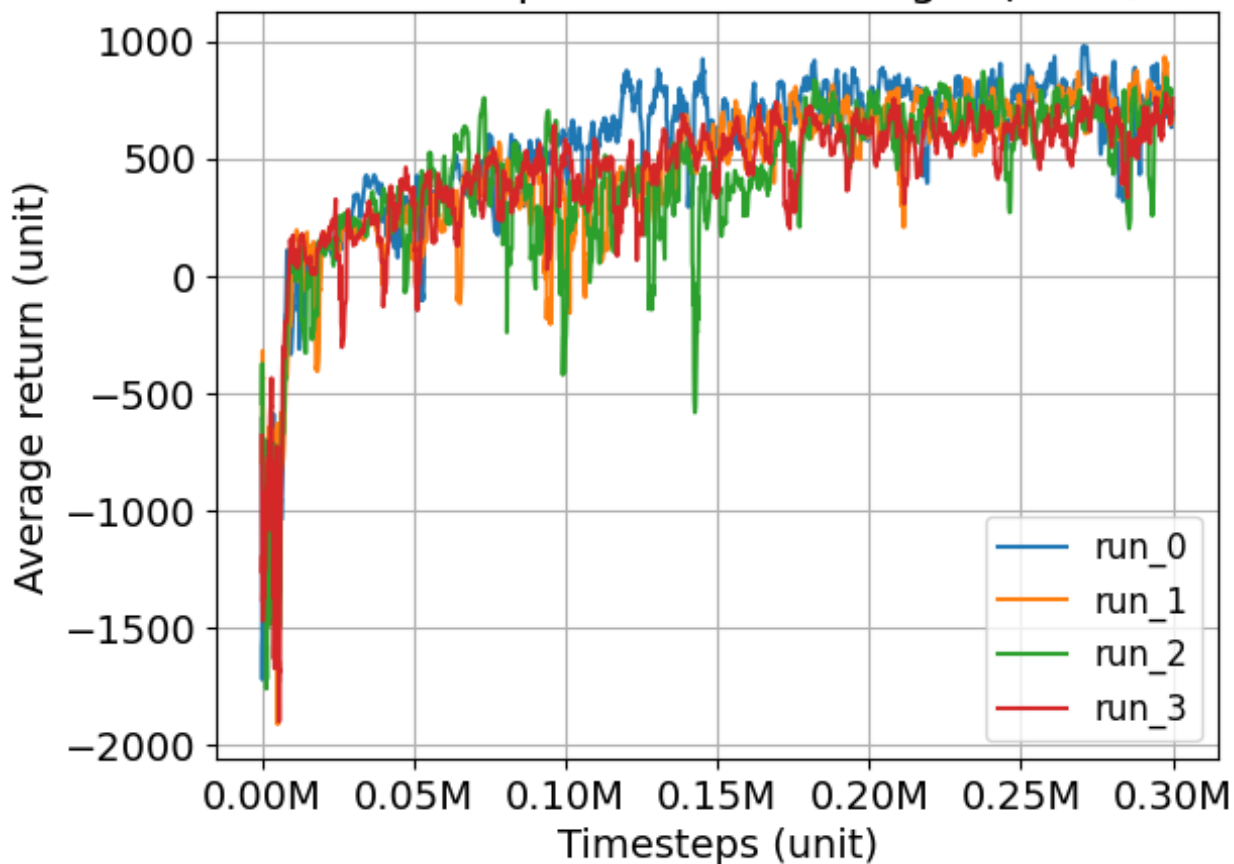
policy\_noise:0.2

noise\_clip:0.5

policy\_freq:1

```
experiment=03_training_sac_cuda_622
experiments=['training_sac_cuda_622']
algorithms=['SAC']
averaging window=10 (user assigned)
```

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



title	sac_cuda_622:SAC
run #0	757.9065 ± 379.2055
run #1	720.9769 ± 231.6635
run #2	655.8008 ± 338.8201
run #3	631.1589 ± 276.4327
mean	691.4608 ± 306.5305

```
runs_involved=['1681372314_0', '1681372314_1', '1681372314_2',  
'1681372314_3']
```

End of automated test report 2023-04-14 12:49:44