

# Experiment Report

Start of automated test report 2024-08-19 07:03:06

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## Machine Information

sysname=Linux

nodename=LabYu

release=6.5.0-44-generic

version=#44~22.04.1-Ubuntu SMP PREEMPT\_DYNAMIC Tue Jun 18 14:36:16 UTC 2

machine=x86\_64

CPU arch : X86\_64

CPU bits : 64

CPU brand : 11th Gen Intel(R) Core(TM) i7-1165G7 @ 2.80GHz

CPU cores : 2

CPU base clock : 2.8000 GHz

CPU boost clock : 2.8032 GHz

System Memory : 7.71GB

Without use Cuda

## Library Information

python : 3.8.19

torch : 1.13.1+cpu

optuna : 3.2.0

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

## Hpyerparameters

/home/yu/Work/RL\_PCB-main/tests/10\_training\_dqn\_cpu\_fast/hyperparameters/hp\_ddpg.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

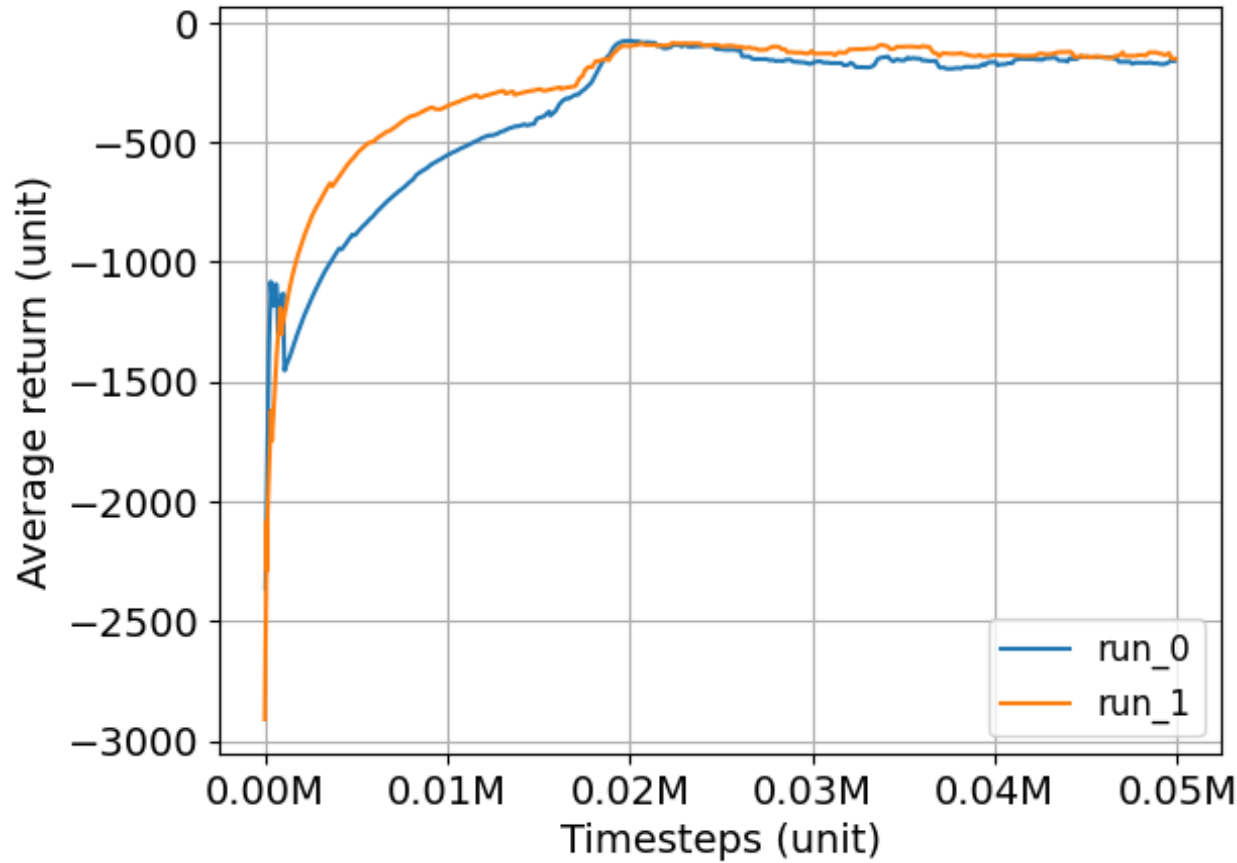
policy\_noise:0.2

noise\_clip:0.5

policy\_freq:2

experiment=10\_training\_dqn\_cuda\_fast\_262  
experiments=['training\_dqn\_cpu\_262']  
algorithms=['DQN']  
averaging window=100 (user assigned)

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



title	dqn_cpu_262:DQN
run #0	-132.1106 ± 358.4428
run #1	-156.8846 ± 400.6668
mean	-144.4976 ± 379.5548

runs\_involved=['1724003076\_0', '1724003076\_1']

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