Welcome to TROJAN-GO !!!

****

System Info ...

GPU/CPU Info ...

[name: "/device:CPU:0"

device_type: "CPU"

memory_limit: 268435456

locality {

}

incarnation: 15967978118234998048

, name: "/device:XLA_CPU:0"

device_type: "XLA_CPU"

memory_limit: 17179869184

locality {

}

incarnation: 8239924477268725173

physical_device_desc: "device: XLA_CPU device"

]

platform:Darwin

platform-release:18.6.0

platform-version:Darwin Kernel Version 18.6.0: Thu Apr 25 23:16:27 PDT 2019; root:xnu-4903.261.4~2/RELEASE_X86_64

architecture:x86_64

hostname:Pujas-Air.Dlink

ip-address:192.168.0.5

mac-address:30:35:ad:d6:86:0c

processor:i386

ram:8 GB

Cores:4

****

[Data Generation starts] Reference: ./checkpoints/iteration_Savedmodel/initial.json

temp file : /var/folders/c_/bvnjlvc55pvccfrg1jmh_5mw0000gn/T/algo-trainfv5j2i02

temp file : /var/folders/c_/bvnjlvc55pvccfrg1jmh_5mw0000gn/T/algo-traingc9jyn1p

temp file : /var/folders/c_/bvnjlvc55pvccfrg1jmh_5mw0000gn/T/algo-train6vkvogq2

temp file : /var/folders/c_/bvnjlvc55pvccfrg1jmh_5mw0000gn/T/algo-train5rmdkdtb

Waiting for workers...

Using TensorFlow backend.

Using TensorFlow backend.

Using TensorFlow backend.

Using TensorFlow backend.

2020-07-20 14:57:37.612005: I tensorflow/core/platform/cpu_feature_guard.cc:142] Your CPU supports instructions that this TensorFlow binary was not compiled to use: AVX2 FMA

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2020-07-20 14:57:37.612068: I tensorflow/core/platform/cpu_feature_guard.cc:142] Your CPU supports instructions that this TensorFlow binary was not compiled to use: AVX2 FMA

2020-07-20 14:57:37.612870: I tensorflow/core/platform/cpu_feature_guard.cc:142] Your CPU supports instructions that this TensorFlow binary was not compiled to use: AVX2 FMA

2020-07-20 14:57:37.656973: I tensorflow/compiler/xla/service/service.cc:168] XLA service 0x7fdc435431b0 initialized for platform Host (this does not guarantee that XLA will be used). Devices:

2020-07-20 14:57:37.657158: I tensorflow/compiler/xla/service/service.cc:176]   StreamExecutor device (0): Host, Default Version

2020-07-20 14:57:37.657134: I tensorflow/compiler/xla/service/service.cc:168] XLA service 0x7faf02aa86f0 initialized for platform Host (this does not guarantee that XLA will be used). Devices:

2020-07-20 14:57:37.658267: I tensorflow/compiler/xla/service/service.cc:176]   StreamExecutor device (0): Host, Default Version

2020-07-20 14:57:37.659374: I tensorflow/compiler/xla/service/service.cc:168] XLA service 0x7ffbc030d480 initialized for platform Host (this does not guarantee that XLA will be used). Devices:

2020-07-20 14:57:37.659407: I tensorflow/compiler/xla/service/service.cc:176]   StreamExecutor device (0): Host, Default Version

2020-07-20 14:57:37.661205: I tensorflow/compiler/xla/service/service.cc:168] XLA service 0x7fc66f0fb060 initialized for platform Host (this does not guarantee that XLA will be used). Devices:

2020-07-20 14:57:37.661384: I tensorflow/compiler/xla/service/service.cc:176]   StreamExecutor device (0): Host, Default Version

PID: 9015

learning agent : ('./checkpoints/iteration_Savedmodel/initial.json', './checkpoints/iteration_Savedmodel/initial.h5')

reference_agent : ('./checkpoints/iteration_Savedmodel/initial.json', './checkpoints/iteration_Savedmodel/initial.h5')

PID: 9014

learning agent : ('./checkpoints/iteration_Savedmodel/initial.json', './checkpoints/iteration_Savedmodel/initial.h5')

reference_agent : ('./checkpoints/iteration_Savedmodel/initial.json', './checkpoints/iteration_Savedmodel/initial.h5')

PID: 9013

learning agent : ('./checkpoints/iteration_Savedmodel/initial.json', './checkpoints/iteration_Savedmodel/initial.h5')

reference_agent : ('./checkpoints/iteration_Savedmodel/initial.json', './checkpoints/iteration_Savedmodel/initial.h5')

PID: 9012

learning agent : ('./checkpoints/iteration_Savedmodel/initial.json', './checkpoints/iteration_Savedmodel/initial.h5')

reference_agent : ('./checkpoints/iteration_Savedmodel/initial.json', './checkpoints/iteration_Savedmodel/initial.h5')

 [PID : 9015] self-play game is triggered, Get A Cup Of Coffee And Relax !!!

 [PID : 9014] self-play game is triggered, Get A Cup Of Coffee And Relax !!!

 [PID : 9012] self-play game is triggered, Get A Cup Of Coffee And Relax !!!

 [PID : 9013] self-play game is triggered, Get A Cup Of Coffee And Relax !!!

Total time taken to play 1 game(s) is 9.092666149139404

Going to save the examples here : /var/folders/c_/bvnjlvc55pvccfrg1jmh_5mw0000gn/T/algo-train5rmdkdtb

Total time taken to play 1 game(s) is 12.081313610076904

Going to save the examples here : /var/folders/c_/bvnjlvc55pvccfrg1jmh_5mw0000gn/T/algo-trainfv5j2i02

Total time taken to play 1 game(s) is 13.598623991012573

Going to save the examples here : /var/folders/c_/bvnjlvc55pvccfrg1jmh_5mw0000gn/T/algo-traingc9jyn1p

Total time taken to play 1 game(s) is 13.687681674957275

Going to save the examples here : /var/folders/c_/bvnjlvc55pvccfrg1jmh_5mw0000gn/T/algo-train6vkvogq2

Merging experience buffers...

Examples in file /var/folders/c_/bvnjlvc55pvccfrg1jmh_5mw0000gn/T/algo-trainfv5j2i02 is 39

Examples in next file /var/folders/c_/bvnjlvc55pvccfrg1jmh_5mw0000gn/T/algo-traingc9jyn1p is 41

Examples in combined buffer after file /var/folders/c_/bvnjlvc55pvccfrg1jmh_5mw0000gn/T/algo-traingc9jyn1p is 80

Examples in next file /var/folders/c_/bvnjlvc55pvccfrg1jmh_5mw0000gn/T/algo-train6vkvogq2 is 45

Examples in combined buffer after file /var/folders/c_/bvnjlvc55pvccfrg1jmh_5mw0000gn/T/algo-train6vkvogq2 is 125

Examples in next file /var/folders/c_/bvnjlvc55pvccfrg1jmh_5mw0000gn/T/algo-train5rmdkdtb is 25

Examples in combined buffer after file /var/folders/c_/bvnjlvc55pvccfrg1jmh_5mw0000gn/T/algo-train5rmdkdtb is 150

Finally Saved experiences into ./data/exp_temp.hdf5. Please check the size to verify.

[Data Generation finish] Time taken to finish generate experience with multiprocessing(4) is : 24.473855018615723

[Start Training ...]

Using TensorFlow backend.

2020-07-20 14:58:00.518648: I tensorflow/core/platform/cpu_feature_guard.cc:142] Your CPU supports instructions that this TensorFlow binary was not compiled to use: AVX2 FMA

2020-07-20 14:58:00.532172: I tensorflow/compiler/xla/service/service.cc:168] XLA service 0x7fc460ca4870 initialized for platform Host (this does not guarantee that XLA will be used). Devices:

2020-07-20 14:58:00.532202: I tensorflow/compiler/xla/service/service.cc:176]   StreamExecutor device (0): Host, Default Version

Num GPUs Available: 0
num_examples : 150
WARNING:tensorflow:There are non-GPU devices in `tf.distribute.Strategy`, not using nccl allreduce.
INFO:tensorflow:Using MirroredStrategy with devices ('/job:localhost/replica:0/task:0/device:CPU:0',)
Epoch 1/100
150/150 [==============================] - 2s 11ms/step - loss: 4.8453 - dense_1_loss: 3.9131 - dense_3_loss: 0.9696
Epoch 2/100
150/150 [==============================] - 0s 959us/step - loss: 4.6167 - dense_1_loss: 3.7958 - dense_3_loss: 0.8611
Epoch 3/100
150/150 [==============================] - 0s 938us/step - loss: 4.4284 - dense_1_loss: 3.2966 - dense_3_loss: 1.0166
Epoch 4/100
150/150 [==============================] - 0s 947us/step - loss: 4.3245 - dense_1_loss: 3.3227 - dense_3_loss: 0.9960
Epoch 5/100
150/150 [==============================] - 0s 896us/step - loss: 4.2520 - dense_1_loss: 3.2552 - dense_3_loss: 0.9917
Epoch 6/100
150/150 [==============================] - 0s 962us/step - loss: 4.1946 - dense_1_loss: 3.0855 - dense_3_loss: 1.0164
Epoch 7/100
150/150 [==============================] - 0s 898us/step - loss: 4.1385 - dense_1_loss: 3.1340 - dense_3_loss: 1.0035
Epoch 8/100
150/150 [==============================] - 0s 1ms/step - loss: 4.0715 - dense_1_loss: 3.0702 - dense_3_loss: 0.8740
Epoch 9/100
150/150 [==============================] - 0s 894us/step - loss: 3.5828 - dense_1_loss: 3.0304 - dense_3_loss: 0.4804
Epoch 10/100
150/150 [==============================] - 0s 1ms/step - loss: 3.3393 - dense_1_loss: 2.9673 - dense_3_loss: 0.3417
Epoch 11/100
150/150 [==============================] - 0s 899us/step - loss: 3.4489 - dense_1_loss: 3.1415 - dense_3_loss: 0.2449
Epoch 12/100
150/150 [==============================] - 0s 880us/step - loss: 3.2254 - dense_1_loss: 3.0544 - dense_3_loss: 0.2389
Epoch 13/100
150/150 [==============================] - 0s 921us/step - loss: 3.1012 - dense_1_loss: 3.0251 - dense_3_loss: 0.1616
Epoch 14/100
150/150 [==============================] - 0s 884us/step - loss: 3.1644 - dense_1_loss: 2.9753 - dense_3_loss: 0.1136
Epoch 15/100
150/150 [==============================] - 0s 1ms/step - loss: 2.9330 - dense_1_loss: 2.7850 - dense_3_loss: 0.1195
Epoch 16/100
150/150 [==============================] - 0s 980us/step - loss: 2.9076 - dense_1_loss: 2.7890 - dense_3_loss: 0.0911
Epoch 17/100

150/150 [==============================] - 0s 1ms/step - loss: 3.0249 - dense_1_loss: 2.8165 - dense_3_loss: 0.2006
Epoch 18/100
150/150 [==============================] - 0s 890us/step - loss: 2.9361 - dense_1_loss: 2.7985 - dense_3_loss: 0.0690
Epoch 19/100
150/150 [==============================] - 0s 905us/step - loss: 2.6831 - dense_1_loss: 2.5787 - dense_3_loss: 0.0535
Epoch 20/100
150/150 [==============================] - 0s 897us/step - loss: 2.9741 - dense_1_loss: 2.8554 - dense_3_loss: 0.0697
Epoch 21/100
150/150 [==============================] - 0s 872us/step - loss: 2.7815 - dense_1_loss: 2.8174 - dense_3_loss: 0.0579
Epoch 22/100
150/150 [==============================] - 0s 891us/step - loss: 2.8140 - dense_1_loss: 2.6502 - dense_3_loss: 0.1148
Epoch 23/100
150/150 [==============================] - 0s 887us/step - loss: 2.8656 - dense_1_loss: 2.7142 - dense_3_loss: 0.1033
Epoch 24/100
150/150 [==============================] - 0s 903us/step - loss: 2.9123 - dense_1_loss: 2.7443 - dense_3_loss: 0.1141
Saved model to disk
trained model saved to disk : ('./checkpoints/iteration_Savedmodel/agent_temp.json', './checkpoints/iteration_Savedmodel/agent_temp.h5')
[Training ends !!!]
[Evaluation starts] ...
learning agent ('./checkpoints/iteration_Savedmodel/initial.json', './checkpoints/iteration_Savedmodel/initial.h5') & reference_agent ('./checkpoints/iteration_Savedmodel/initial.json', './checkpoints/iteration_Savedmodel/initial.h5')
Using TensorFlow backend.
Using TensorFlow backend.
Using TensorFlow backend.
Using TensorFlow backend.
2020-07-20 14:58:13.209920: I tensorflow/core/platform/cpu_feature_guard.cc:142] Your CPU supports instructions that this TensorFlow binary was not compiled to use: AVX2 FMA
2020-07-20 14:58:13.232618: I tensorflow/compiler/xla/service/service.cc:168] XLA service 0x7fb1d6ea06d0 initialized for platform Host (this does not guarantee that XLA will be used). Devices:
2020-07-20 14:58:13.232674: I tensorflow/compiler/xla/service/service.cc:176]   StreamExecutor device (0): Host, Default Version
2020-07-20 14:58:13.233135: I tensorflow/core/platform/cpu_feature_guard.cc:142] Your CPU supports instructions that this TensorFlow binary was not compiled to use: AVX2 FMA
2020-07-20 14:58:13.240944: I tensorflow/core/platform/cpu_feature_guard.cc:142] Your CPU supports instructions that this TensorFlow binary was not compiled to use: AVX2 FMA
2020-07-20 14:58:13.249970: I tensorflow/core/platform/cpu_feature_guard.cc:142] Your CPU supports instructions that this TensorFlow binary was not compiled to use: AVX2 FMA
2020-07-20 14:58:13.258337: I tensorflow/compiler/xla/service/service.cc:168] XLA service 0x7ffe31d196b0 initialized for platform Host (this does not guarantee that XLA will be used). Devices:
2020-07-20 14:58:13.258665: I tensorflow/compiler/xla/service/service.cc:176]   StreamExecutor device (0): Host, Default Version
2020-07-20 14:58:13.266657: I tensorflow/compiler/xla/service/service.cc:168] XLA service 0x7fa6515475c0 initialized for platform Host (this does not guarantee that XLA will be used). Devices:
2020-07-20 14:58:13.266713: I tensorflow/compiler/xla/service/service.cc:176]   StreamExecutor device (0): Host, Default Version

2020-07-20 14:58:13.280222: I tensorflow/compiler/xla/service/service.cc:168] XLA service 0x7fabfc5e8800 initialized for platform Host (this does not guarantee that XLA will be used). Devices:
2020-07-20 14:58:13.280280: I tensorflow/compiler/xla/service/service.cc:176]   StreamExecutor device (0): Host, Default Version
Simulating game 1/1...
Agent 1 playing as black and Agent 2 as white
Simulating game 1/1...
Agent 1 playing as black and Agent 2 as white
Simulating game 1/1...
Agent 1 playing as black and Agent 2 as white
Simulating game 1/1...
Agent 1 playing as black and Agent 2 as white
Agent 1 wins
Agent 1 record: 1/1
Agent 1 wins
Agent 1 record: 1/1
Agent 1 wins
Agent 1 record: 1/1
Agent 1 wins
Agent 1 record: 1/1
FINAL RESULTS:
Learner: 4
Refrnce: 0
Won 4 / 4 games (1.000)
[Evaluation ends] New reference is : ('./checkpoints/iteration_Savedmodel/agent_00000004.json', './checkpoints/iteration_Savedmodel/agent_00000004.h5')

    # Operator Micro-benchmarks
    # Iteration : 1
    # Learning Agent : ('./checkpoints/iteration_Savedmodel/agent_cur.json', './checkpoints/iteration_Savedmodel/agent_cur.h5')
    # Reference Agent : ('./checkpoints/iteration_Savedmodel/agent_00000004.json', './checkpoints/iteration_Savedmodel/agent_00000004.h5')
    # Games Per Batch : 4
    # Simulations per move : 5
    # Number of workers : 4
    # Number of Games for Eval : 4
    # Experience Time : 24.473855018615723
    # Training time : 14.888544082641602
    # Evaluation time : 16.21452307701111
    # Total Loop time : 55.5949170589447