train_examples_local_naive_net

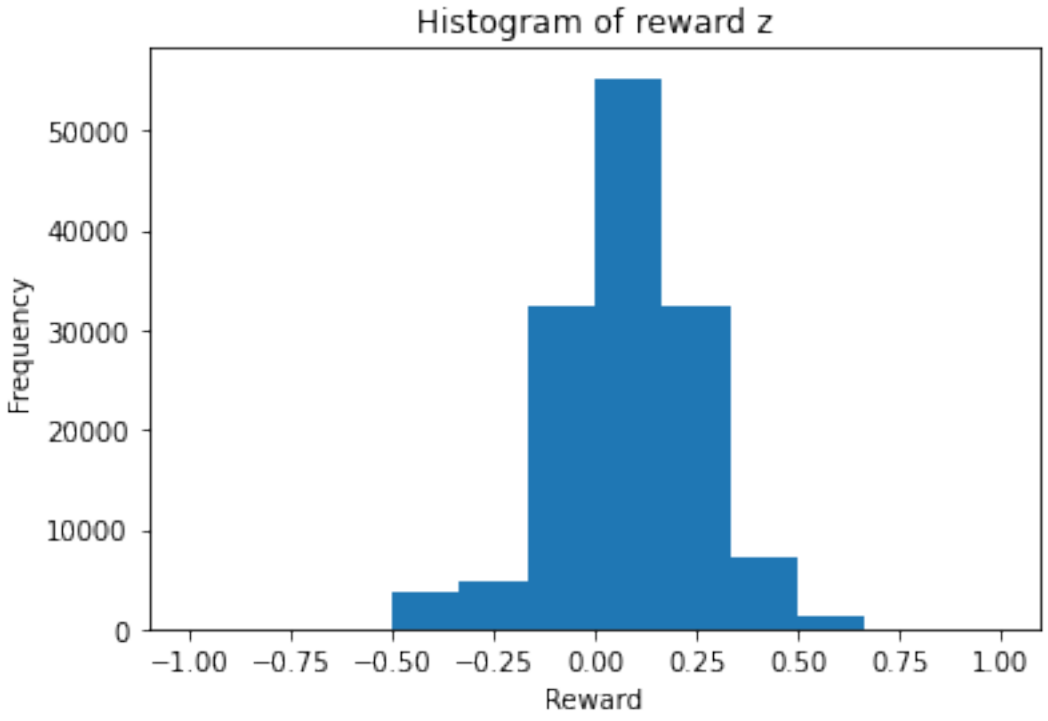
February 2, 2022

[ ]:
```
import os
import sys
from tensorflow.python.lib.io import file_io
from pickle import Unpickler
import numpy as np
from matplotlib import pyplot as plt
import numpy as np


def load_z_s(number):
    path = f'/run/media/ture/Backup Plus/data/2022-01-28_local_training/
 ↪checkpoint_{number}.pth.tar.examples'
    train_examples_history = []
    if not os.path.isfile(path):
        print(f'File "{path}" with trainExamples not found!')
        r = input("Continue? [y|n]")
        if r != "y":
            sys.exit()
    else:
        print("File with trainExamples found. Loading it...")
        with file_io.FileIO(path, "rb") as f:
            train_examples_history = Unpickler(f).load()
        print('Loading done!')
    z_s = []
    for experience in train_examples_history:
        z = experience[2]
        z_s.append(z)
    return z_s

def hist(z_s):
    plt.hist(z_s, bins = [-1, -5/6, -2/3 ,-1/2, -1/3, -1/6, -1e-08, 1e-08, 1/6,␣
 ↪1/3, 1/2, 2/3, 5/6, 1], density=False)
    plt.title("Histogram of reward z")
    plt.xlabel("Reward")
    plt.ylabel("Frequency")
    plt.show()
```

```
z_s_1 = load_z_s(5)

print(np.median(z_s_1))
print(np.mean(z_s_1))
```

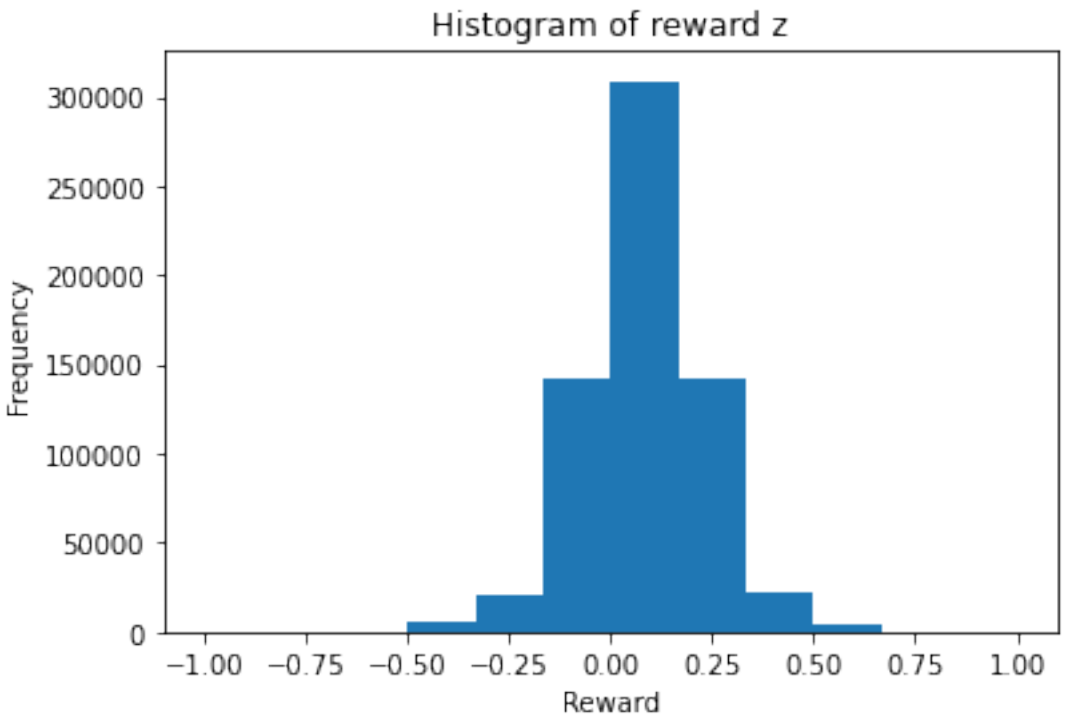
```
File with trainExamples found. Loading it…
Loading done!
-1e-08
-1.6722060624415436e-11
```

[ ]:
```
hist(z_s_1)
```



[ ]:
```
z_s_10 = load_z_s(20)
hist(z_s_10)
```

```
File with trainExamples found. Loading it…
Loading done!
```


Histogram of reward z
Frequency
300000
250000
200000
150000
100000
50000
0
−1.00
−0.75
−0.50
−0.25
0.00
0.25
0.50
0.75
1.00
Reward