Specifications/Steps to Reproduce Results

Cloud and Hardware Specifications

CPU	**2vCPU - 13 GB, Quad core Intel i5-4690K @ 3.5 GHz**
GPU	**1xNVIDIA Tesla V100, 1x NVIDIA GeForce GTX 980 Ti**
Zone	**us-west-1b**
Cloud	**Google Cloud Platform**

Model Specifications

MODEL	Network	TRAINING TIME	# EPISODES	BATCH SIZE & LEARNING RATE
Baseline	**4 Layer Dense Neural Network**	**~ 17 Hours**	**75**	**50; 0.09**
Advanced	**5 Layer CNN**	**~ 5 Hours**	**320**	**256; 0.0001**

Baseline Architecture

Layer 1	Layer 2	Layer 3	Layer 4
24 (relu)	**48 (relu)**	**72 (relu)**	**96 (relu)**

CNN Architecture

	Width	Height	Depth	# Params	Filter Width	Filter Height	Filter Depth	Filter Count	Stride Width	Stride Height
Input	240	256	3							
Conv 1	55	59	32	55328	24	24	3	32	4	4
Conv 2	22	22	64	452672	13	17	32	64	2	2
Conv 3	11	11	64	589888	12	12	64	64	1	1
Conv 4	4	4	128	524416	8	8	64	128	1	1
Conv 5	1	1	128	262272	4	4	128	128	1	1
Subtotal				1884576						
Value Stream	1	1	64	0						
Adv Stream	1	1	64	0						
Value Flat			64	0						
Adv Flat			64	0						
Value FC			1	65						
Adv FC			7	455						
Final Output			7	0						
Total Params				1885096						

Installing gym_super_mario_bros

After Gym is installed and imported, follow these steps to see a demo environment render.

```
!pip install gym_super_mario_bros

from nes_py.wrappers import BinarySpaceToDiscreteSpaceEnv
import gym_super_mario_bros
from gym_super_mario_bros.actions import SIMPLE_MOVEMENT
env = gym_super_mario_bros.make('SuperMarioBros-v2')
env = BinarySpaceToDiscreteSpaceEnv(env, SIMPLE_MOVEMENT)

done = True
for step in range(5000):
    if done:
        state = env.reset()
    state, reward, done, info = env.step(env.action_space.sample())
    env.render()

env.close()
```