

Continuous control DRL test log

Test #1 (07012019)

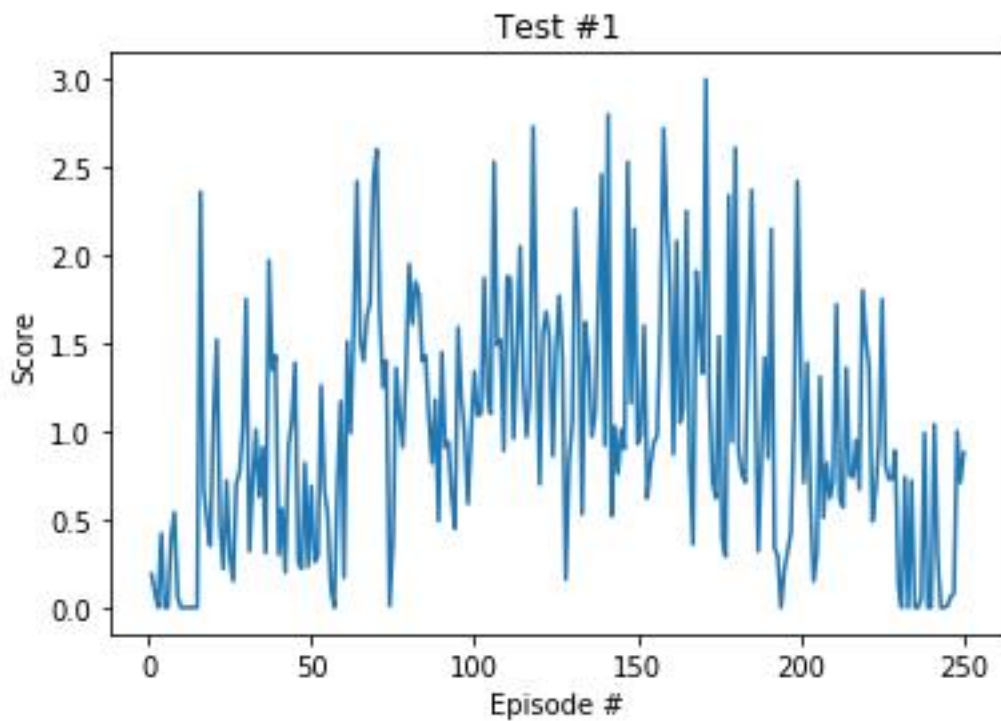
Test info:

250 episodes with 1000 steps per episode using DDPG for 1 agent

Parameter:

BUFFER_SIZE = int(1e5)	# replay buffer size
BATCH_SIZE = 128	# minibatch size
GAMMA = 0.99	# discount factor
TAU = 1e-3	# for soft update of target parameters
LR_ACTOR = 1e-4	# learning rate of the actor
LR_CRITIC = 1e-3	# learning rate of the critic
WEIGHT_DECAY = 0	# L2 weight decay

Result



Test #2 (07022019)

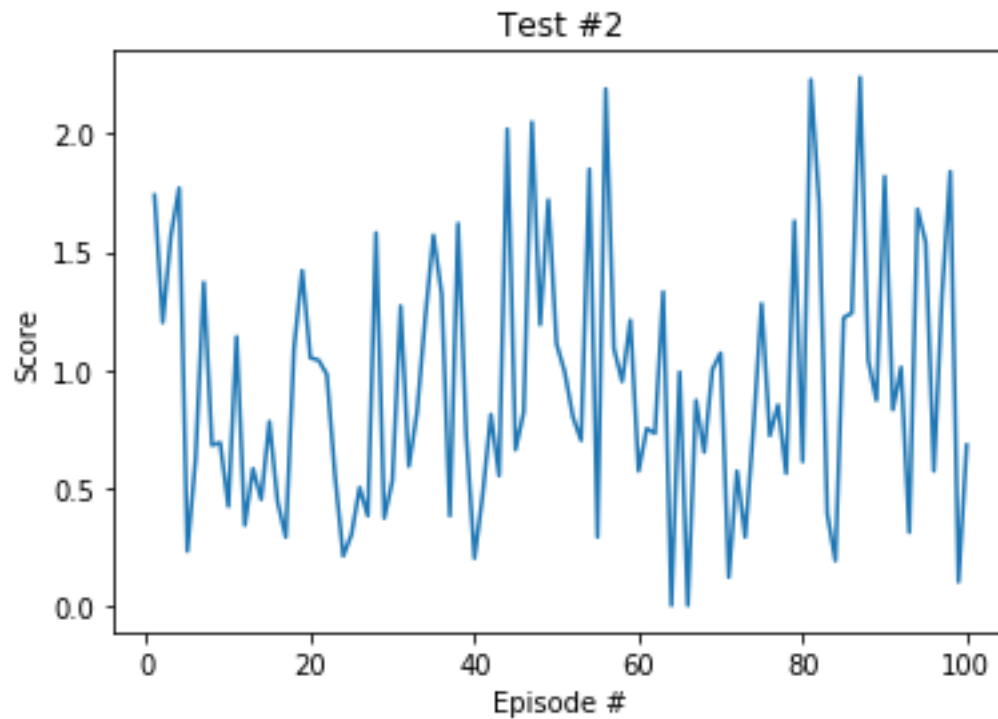
Test info:

100 episodes with 1000 steps per episode using DDPG for 1 agent

Parameter:

<code>BUFFER_SIZE = int(1e6)</code>	# replay buffer size
<code>BATCH_SIZE = 1000</code>	# minibatch size
<code>GAMMA = 0.99</code>	# discount factor
<code>TAU = 1e-3</code>	# for soft update of target parameters
<code>LR_ACTOR = 1e-4</code>	# learning rate of the actor
<code>LR_CRITIC = 1e-3</code>	# learning rate of the critic
<code>WEIGHT_DECAY = 0</code>	# L2 weight decay

Result



Test #3 (07032019)

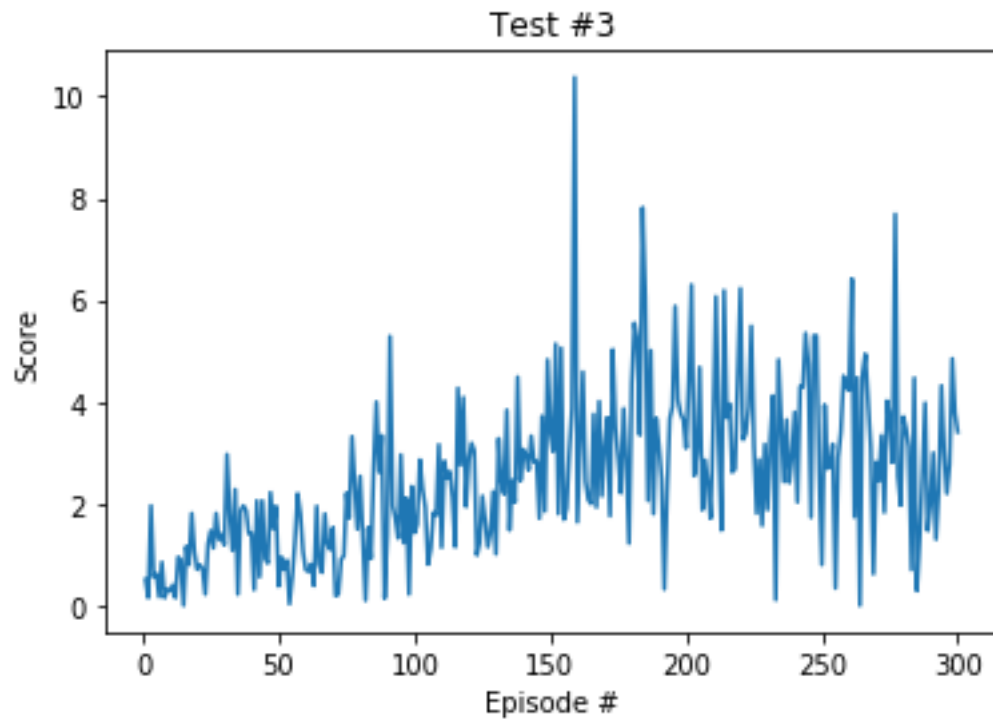
Test info:

300 episodes with 1000 steps per episode using DDPG for 1 agent

Parameter:

<code>BUFFER_SIZE = int(1e5)</code>	# replay buffer size
<code>BATCH_SIZE = 20</code>	# minibatch size
<code>GAMMA = 0.99</code>	# discount factor
<code>TAU = 1e-3</code>	# for soft update of target parameters
<code>LR_ACTOR = 1e-4</code>	# learning rate of the actor
<code>LR_CRITIC = 1e-3</code>	# learning rate of the critic
<code>WEIGHT_DECAY = 0</code>	# L2 weight decay

Result



Test #5 (07042019)

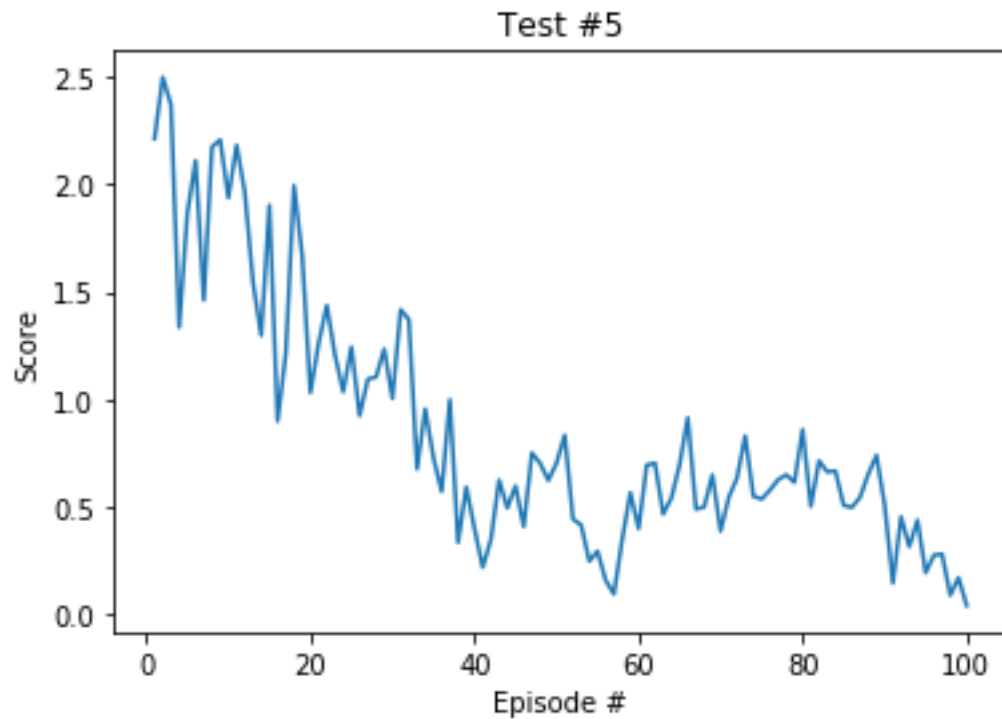
Test info:

100 episodes with 1000 steps per episode using DDPG for 20 agents

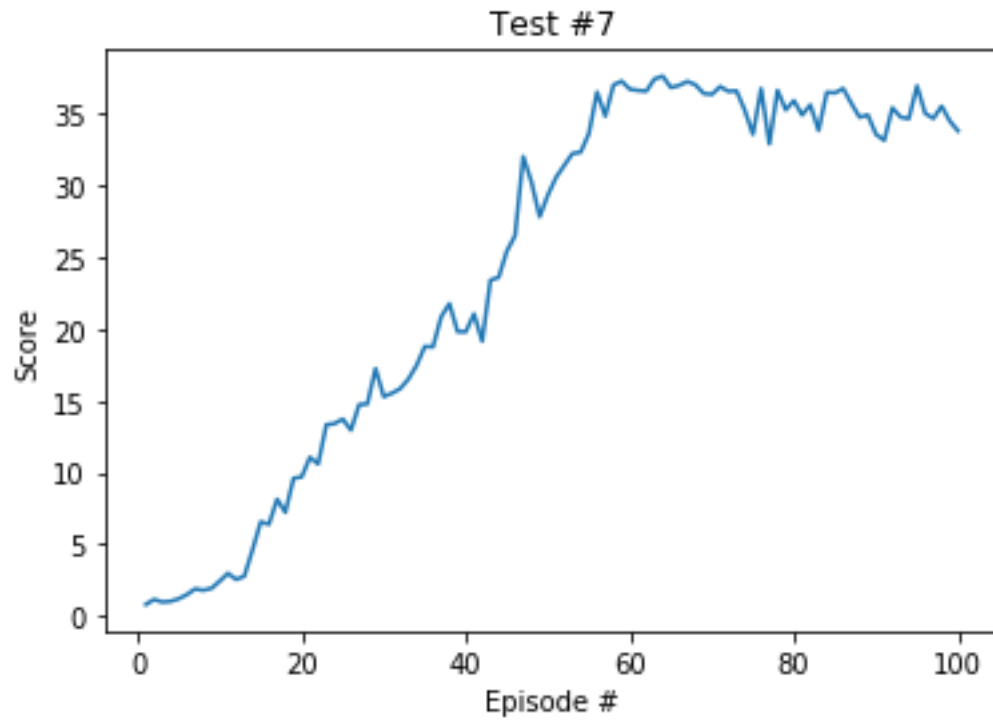
Parameter:

<code>BUFFER_SIZE = int(1e5)</code>	# replay buffer size
<code>BATCH_SIZE = 200</code>	# minibatch size
<code>GAMMA = 0.99</code>	# discount factor
<code>TAU = 1e-3</code>	# for soft update of target parameters
<code>LR_ACTOR = 1e-4</code>	# learning rate of the actor
<code>LR_CRITIC = 1e-3</code>	# learning rate of the critic
<code>WEIGHT_DECAY = 0</code>	# L2 weight decay

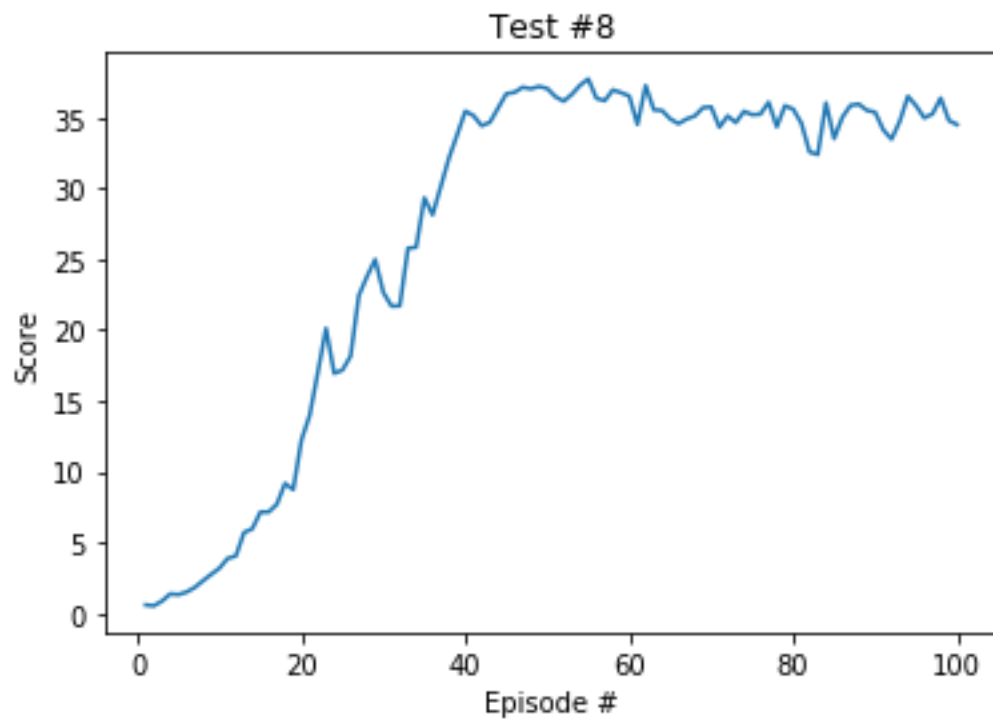
Result



Test #7



Test #8



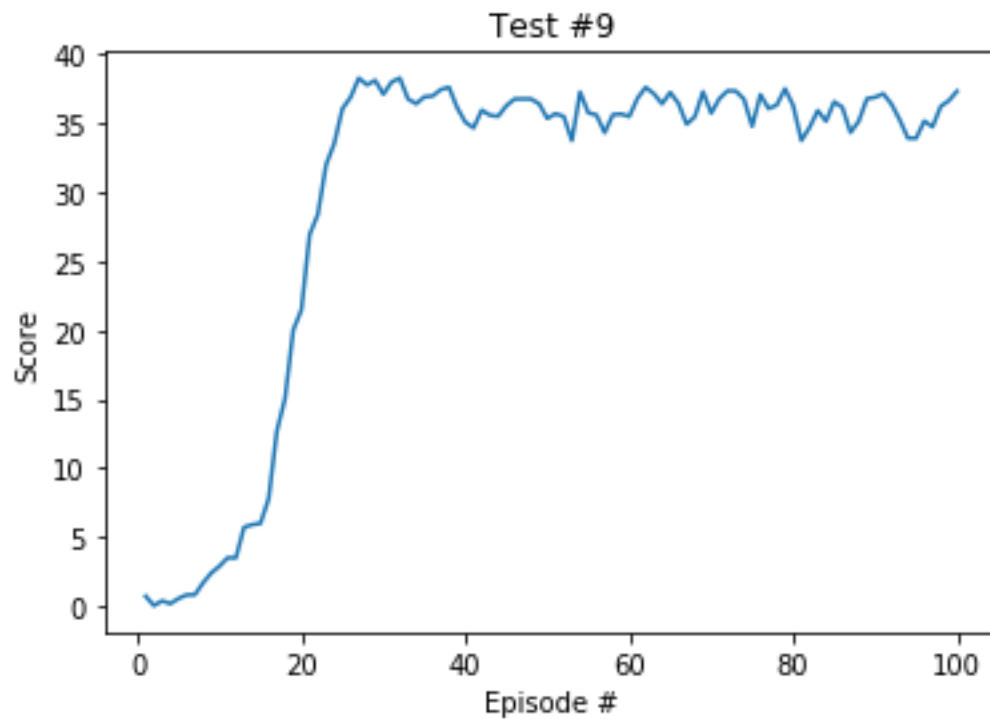
Test #9 (07042019)

Test info:

100 episodes with 1000 steps per episode using DDPG for 20 agents, learning once every 50 steps.

Parameter:

<code>BUFFER_SIZE = int(1e5)</code>	# replay buffer size
<code>BATCH_SIZE = 1000</code>	# minibatch size
<code>GAMMA = 0.99</code>	# discount factor
<code>TAU = 1e-3</code>	# for soft update of target parameters
<code>LR_ACTOR = 1e-4</code>	# learning rate of the actor
<code>LR_CRITIC = 1e-3</code>	# learning rate of the critic
<code>WEIGHT_DECAY = 0</code>	# L2 weight decay



Test #10 (07052019)

Test info:

100 episodes with 1000 steps per episode using DDPG for 20 agents learning 3 times every 50 steps.

Parameter:

<code>BUFFER_SIZE = int(1e5)</code>	# replay buffer size
<code>BATCH_SIZE = 1000</code>	# minibatch size
<code>GAMMA = 0.99</code>	# discount factor
<code>TAU = 1e-3</code>	# for soft update of target parameters
<code>LR_ACTOR = 1e-4</code>	# learning rate of the actor
<code>LR_CRITIC = 1e-3</code>	# learning rate of the critic
<code>WEIGHT_DECAY = 0</code>	# L2 weight decay

