

Project report

Learning algorithm

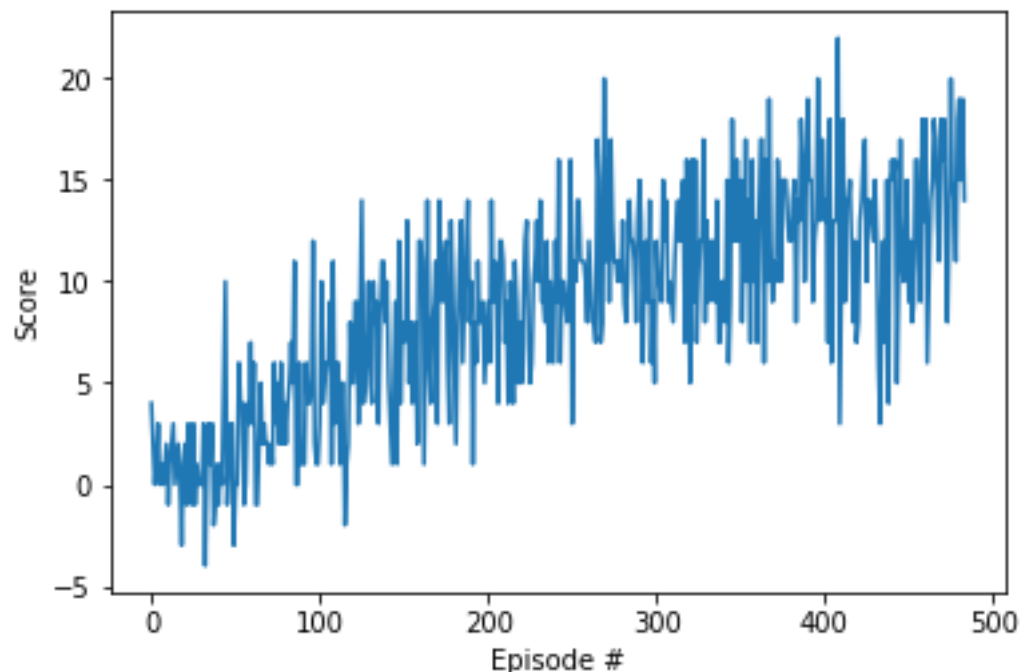
The learning algorithm used is vanilla Deep Q Learning as described in original paper. As an input the vector of state is used instead of an image so convolutional neural network is replaced with deep neural network. The deep neural network has following layers:

- Fully connected layer - input: 37 (state size) output: 128
- Fully connected layer - input: 64 output 64
- Fully connected layer - input: 64 output: (action size)

Parameters used in DQN algorithm:

- Maximum timesteps per episode: 1000
- Starting eps: 0.5
- Ending eps: 0.01
- Eps decay rate: 0.995

Results



Ideas for Future Work

Above results can be improved by following below approaches

1. Use convolutional neural network
2. Parameter Optimization of network
3. Double DQN
4. Dueling DQN
5. Prioritized Experience Replay