# Notes on Proximal Policy Optimization Algorithms by John Schulman et al

Compiled by D. Gueorguiev 2/16/2024

## Introduction

Relevant papers:

Deep Q Learning paper: [Human-level control through deep reinforcement learning, Volodymyr Mnih et al, Nature, 2015](https://github.com/dimitarpg13/reinforcement_learning_and_game_theory/blob/main/articles/ReinforcementLearning/Human-level_control_through_deep_reinforcement_learning_Mnih_2015.pdf)

“Vanilla” policy gradient methods: [Asynchronous methods for deep reinforcement learning, Volodymyr Mnih et al, Google DeepMind, 2016](https://github.com/dimitarpg13/reinforcement_learning_and_game_theory/blob/main/articles/ReinforcementLearning/Asynchronous_Methods_for_Deep_Reinforcement_Learning_Mnih_2016.pdf)

Trust Region / natural policy gradient methods: [Trust Region Policy Optimization, John Schulman et al, OpenAI, 2017](https://github.com/dimitarpg13/reinforcement_learning_and_game_theory/blob/main/articles/ReinforcementLearning/TrustRegionPolicyOptimization_Schulman_2015.pdf)

## Literature

[Human-level control through deep reinforcement learning, Volodymyr Mnih et al, Nature, 2015](https://github.com/dimitarpg13/reinforcement_learning_and_game_theory/blob/main/articles/ReinforcementLearning/Human-level_control_through_deep_reinforcement_learning_Mnih_2015.pdf)

[Asynchronous methods for deep reinforcement learning, Volodymyr Mnih et al, Google DeepMind, 2016](https://github.com/dimitarpg13/reinforcement_learning_and_game_theory/blob/main/articles/ReinforcementLearning/Asynchronous_Methods_for_Deep_Reinforcement_Learning_Mnih_2016.pdf)

[Trust Region Policy Optimization, John Schulman et al, OpenAI, 2017](https://github.com/dimitarpg13/reinforcement_learning_and_game_theory/blob/main/articles/ReinforcementLearning/TrustRegionPolicyOptimization_Schulman_2015.pdf)