Welcome to Deep Reinforcement Learning

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Reinforcement Learning: building code that performs complex tasks

↳ Deep RL : Model from deep neural network

e.g (AlphaGo board Game)

RL in Real Word:

→ video games
→ robotics
→ predicting stock market

Overview of Nano degree:

1. Foundations of RL

→ Markov - Decision Processes (MDPs)
→ SARSA
→ Q Learning

2. Value Based Methods

→ Deep Q Networks (DQN)
→ Prioritized Experience Replay, Dueling Network

3. Policy Based Methods

→ Proximal Policy Optimization (PPO)

→ Advantage - Actor - Critic (A2C)

→ Deep Deterministic Policy Gradients (DDPG)

4. Multi-Agent Reinforcement Learning

→ Monte Carlo Tree Search (MCTS)