

Summary and Highlights: Introduction to Reinforcement Learning with Keras

Congratulations! You have completed this module. At this point in the course, you know:

- The key innovations of deep Q-networks (DQNs) include experience replay and target networks, which help stabilize training and improve performance.
- The steps to implement DQNs include initializing the environment, building the Q-network and target network, implementing experience replay, training the Q-network, and evaluating the agent.
- Reinforcement learning is a powerful tool for training agents to make decisions in complex environments, and Q-learning is one of the foundational algorithms in this field.
- The essence of Q-learning lies in the Q-value function $Q(s, a)$.
- The Q-values are updated iteratively using the Bellman equation, which incorporates both the immediate reward and the estimated future rewards.