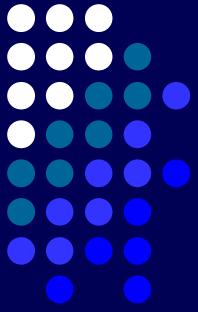


Fitted Q-iteration in continuous action-space Markovian Decision Processes

András Antos, Remi Munos, Csaba Szepesvári
Poster ID T6



Fitted Q-iteration:

$$Q_{k+1} = \text{Regress}(D_k(Q_k)),$$
$$D_k(Q_k) = \left\{ \left[(X_t, A_t), R_t + \gamma \max_{b \in \mathcal{A}} Q_k(X_{t+1}, b) \right]_{1 \leq t \leq N} \right\}.$$

- Does this algorithm work?
- When?
 - Rigorous analysis
 - Actor-critic variant
 - Error bounds

Continuous action spaces

Continuous state spaces

Single trajectory input