

Errata to Q -learning

Chris Watkins & Peter Dayan
Machine Learning 8:272–292

1. We are very grateful to Syed Bilal Mehdi for pointing out an error in the bottom equation on page 280. It should read:

$$Q^\pi(x, a) = \mathcal{R}_x(a) + \gamma \sum_y P_{xy}[a] V^\pi(y).$$

2. We are very grateful to Ali Eshragh Jahromi for pointing out an error in Lemma B.4 on page 291.

The assumption in the lemma about the proximity of $P_{xy}^i[a]$ to $P_{xy}[a]$ should read:

$$\sum_y |P_{xy}^i[a] - P_{xy}[a]| < \frac{\eta}{\mathcal{R}}, \forall x, a \quad (1)$$