Errata for "Two-step reinforcement learning for model-free redesign of nonlinear optimal regulator"[1]

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This is a list of error corrections for the above article. The authors would like to apologize any inconvenience caused.

- In Problem 2.2, "$Q \in \mathbb{R}^{n\times n}$ and $R \in \mathbb{R}^{m\times m}$ are given positive semi-definite and positive definite symmetric matrices, respectively" should be "$Q \in \mathbb{R}^{n\times n}$ and $R \in \mathbb{R}^{m\times m}$ are given positive definite symmetric matrices" to align with the reference [2], which Algorithm 1 and Theorem 4.1 are based on.
- The symbol $\boldsymbol{i}_{k_\mathrm{s}}$ after eqs. (19) and (20) should be $\mathbf{u}_{k_\mathrm{s}}$.
- The first entry of K^{AC} and $K^\star$ in Table 2 should be -2.80, not -2.77.

References

[1] M. Minami, Y. Masumoto, Y. Okawa, T. Sasaki, and Y. Hori, "Two-step reinforcement learning for model-free redesign of nonlinear optimal regulator," *SICE Journal of Control, Measurement, and System Integration*, vol. 16, no. 1, pp. 349–362, 2023.

[2] G. A. Hewer, "An iterative technique for the computation of the steady state gains for the discrete optimal regulator," *IEEE Transactions on Automatic Control*, vol. 16, no. 4, pp. 382–384, 1971.

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