Reproducibility Checklist for Reinforcement Learning Research with Hyperparameter Optimization

1. Are there training and test settings available on your chosen domains?
   If yes:
   - Is only the training setting used for training? ✓✗
   - Is only the training setting used for tuning? ✓✗
   - Are final results reported on the test setting? ✓✗
2. Hyperparameters were tuned using <`package-name`> which is based on <`an-optimization-method`>
3. The configuration space was: <`algorithm-1`>:
   - <`a-continuous-hyperparameter`>: (<`lower`>, <`upper`>)
   - <`a-logspaced-continuous-hyperparameter`>: log((<`lower`>, <`upper`>))
   - <`a-discrete-hyperparameter`>: [<`lower`>, <`upper`>]
   - <`a-categorical-hyperparameter`>: <`choice-a`>, <`choice-b`>
   - ...

   <`algorithm-2`>:
   - <`an-additional-hyperparameter`>: (<`lower`>, <`upper`>)
   - ...
4. The search space contains the same hyperparameters and search ranges wherever algorithms share hyperparameters ✓✗
   If no, why not?
5. The cost metric(s) optimized was/were <`a-cost-metric`>
6. The tuning budget was <`the-budget`>
7. The tuning budget was the same for all tuned methods ✓✗
   If no, why not?
8. If the budget is given in time: the hardware used for all tuning runs is comparable ✓✗
9. All methods that were reported were tuned with this the methods and settings described above ✓✗
   If no, why not?
10. Tuning was done across $< n >$ tuning seeds which were: [$< 0 >$, $< 1 >$, $< 2 >$, $< 3 >$, $< 4 >$]
11. Testing was done across $< m >$ test seeds which were: [$< 5 >$, $< 6 >$, $< 7 >$, $< 8 >$, $< 9 >$]
12. Are all results reported on the test seeds? ✓✗
    If no, why not?

13. The final incumbent configurations reported were:
    <algorithm-1-env-1>:
    - <a-hyperparameter>: <value>
    - ...

    <algorithm-1-env-2>:
    - <a-hyperparameter>: <value>
    - ...

    <algorithm-2-env-1>:
    - <a-hyperparameter>: <value>
    - ...
14. The code for reproducing these experiments is available at: <a-link>
15. The code also includes the tuning process ✓✗
16. Bundled with the code is an exact version of the original software environment, e.g. a conda environment file with all package versions or a docker image in case some dependencies are not conda installable ✓✗
17. The following hardware was used in running the experiments:
    - <n> <gpu-types>
    - ...