Reproducibility Checklist

Instructions for Authors:

This document outlines key aspects for assessing reproducibility. Please provide your input by editing this file directly.

For each question (that applies), replace the "Type your response here" text with your answer.

Example: If a question appears as

Proofs of all novel claims are included (yes/partial/no) Type your response here

you would change it to:

Proofs of all novel claims are included (yes/partial/no) yes

Please make sure to:

- Replace ONLY the "Type your response here" text and nothing else. Keep the blue color for your answer.
- Use one of the options listed for that question (e.g., yes, no, partial, or NA).
- Not modify any other part of the question or any other lines in this document.

Check the instructions on your conference's website to see if you will be asked to provide this checklist appended to your paper or as a separate document.

1. General Paper Structure

- 1.1. Includes a conceptual outline and/or pseudocode description of AI methods introduced (yes/partial/no/NA)

 Type your response here
- 1.2. Clearly delineates statements that are opinions, hypothesis, and speculation from objective facts and results (yes/no) Type your response here
- 1.3. Provides well-marked pedagogical references for lessfamiliar readers to gain background necessary to replicate the paper (yes/no) Type your response here

2. Theoretical Contributions

2.1. Does this paper make theoretical contributions? (yes/no) Type your response here

If yes, please address the following points:

- 2.2. All assumptions and restrictions are stated clearly and formally (yes/partial/no) Type your response here
- 2.3. All novel claims are stated formally (e.g., in theorem statements) (yes/partial/no) Type your response here
- 2.4. Proofs of all novel claims are included (yes/partial/no)

 Type your response here
- 2.5. Proof sketches or intuitions are given for complex and/or novel results (yes/partial/no) Type your response here
- 2.6. Appropriate citations to theoretical tools used are given (yes/partial/no) Type your response here
- 2.7. All theoretical claims are demonstrated empirically to hold (yes/partial/no/NA) Type your response here
- 2.8. All experimental code used to eliminate or disprove claims is included (yes/no/NA) Type your response here

3. Dataset Usage

3.1. Does this paper rely on one or more datasets? (yes/no) Type your response here

If yes, please address the following points:

- 3.2. A motivation is given for why the experiments are conducted on the selected datasets (yes/partial/no/NA) Type your response here
- 3.3. All novel datasets introduced in this paper are included in a data appendix (yes/partial/no/NA) Type your response here
- 3.4. All novel datasets introduced in this paper will be made publicly available upon publication of the paper with a license that allows free usage for research purposes (yes/partial/no/NA) Type your response here
- 3.5. All datasets drawn from the existing literature (potentially including authors' own previously published work) are accompanied by appropriate citations (yes/no/NA) Type your response here
- 3.6. All datasets drawn from the existing literature (potentially including authors' own previously published work) are publicly available (yes/partial/no/NA) Type your response here
- 3.7. All datasets that are not publicly available are described in detail, with explanation why publicly available alternatives are not scientifically satisficing (yes/partial/no/NA) Type your response here

4. Computational Experiments

4.1. Does this paper include computational experiments? (yes/no) Type your response here

If yes, please address the following points:

- 4.2. This paper states the number and range of values tried per (hyper-) parameter during development of the paper, along with the criterion used for selecting the final parameter setting (yes/partial/no/NA) Type your response here
- 4.3. Any code required for pre-processing data is included in the appendix (yes/partial/no) Type your response here
- 4.4. All source code required for conducting and analyzing the experiments is included in a code appendix (yes/partial/no) Type your response here
- 4.5. All source code required for conducting and analyzing the experiments will be made publicly available upon publication of the paper with a license that allows free usage for research purposes (yes/partial/no) Type your response here
- 4.6. All source code implementing new methods have comments detailing the implementation, with references to the paper where each step comes from (yes/partial/no) Type your response here
- 4.7. If an algorithm depends on randomness, then the method used for setting seeds is described in a way sufficient to allow replication of results (yes/partial/no/NA) Type your response here
- 4.8. This paper specifies the computing infrastructure used for running experiments (hardware and software), including GPU/CPU models; amount of memory; operating system; names and versions of relevant software libraries and frameworks (yes/partial/no) Type your response here
- 4.9. This paper formally describes evaluation metrics used and explains the motivation for choosing these metrics (yes/partial/no) Type your response here
- 4.10. This paper states the number of algorithm runs used to compute each reported result (yes/no) Type your response here
- 4.11. Analysis of experiments goes beyond single-dimensional summaries of performance (e.g., average; median) to include measures of variation, confidence, or other distributional information (yes/no) Type your response here

- 4.12. The significance of any improvement or decrease in performance is judged using appropriate statistical tests (e.g., Wilcoxon signed-rank) (yes/partial/no) Type your response here
- 4.13. This paper lists all final (hyper-)parameters used for each model/algorithm in the paper's experiments (yes/partial/no/NA) Type your response here