Reproduction Checklist

Methodology Description

- Includes a conceptual outline and/or pseudocode description of AI methods introduced. (*yes / partial / no / NA*)
- Clearly delineates statements that are opinions, hypothesis, and speculation from objective facts and results. (*yes / no*)
- Provides well marked pedagogical references for less-familiar readers to gain background necessary to replicate the paper. (*yes / no*)

Theoretical Contributions

- Does this paper make theoretical contributions? (*yes / no*)
  If yes, please complete the list below.
  - All assumptions and restrictions are stated clearly and formally. (*yes / partial / no*)
  - All novel claims are stated formally (e.g., in theorem statements). (*yes / partial / no*)
  - Proofs of all novel claims are included. (*yes / partial / no*)
  - Proof sketches or intuitions are given for complex and/or novel results. (*yes / partial / no*)
  - Appropriate citations to theoretical tools used are given. (*yes / partial / no*)
  - All theoretical claims are demonstrated empirically to hold. (*yes / partial / no / NA*)
  - All experimental code used to eliminate or disprove claims is included. (*yes / no / NA*)

Datasets

- Does this paper rely on one or more datasets? (*yes / no*)
  If yes, please complete the list below.
  - A motivation is given for why the experiments are conducted on the selected datasets. (*yes / partial / no / NA*)
  - All novel datasets introduced in this paper are included in a data appendix. (*yes / partial / no / NA*)
  - 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*)
  - All datasets drawn from the existing literature are accompanied by appropriate citations. (*yes / no / NA*)
  - All datasets drawn from the existing literature are publicly available. (*yes / partial / no / NA*)
  - 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*)

Computational Experiments

- Does this paper include computational experiments? (*yes / no*)
  If yes, please complete the list below.
  - This paper states the number and range of values tried per (hyper-)parameter during development, along with the criterion used for selecting the final parameter setting. (*yes / partial / no / NA*)
  - Any code required for pre-processing data is included in the appendix. (*yes / partial / no*)
  - All source code required for conducting and analyzing the experiments is included in a code appendix. (*yes / partial / no*)
  - 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*)
  - All source code implementing new methods have comments detailing the implementation, with references to the paper where each step comes from. (*yes / partial / no*)
  - 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*)
  - This paper specifies the computing infrastructure used for running experiments (hardware and software). (*yes / partial / no*)
  - This paper formally describes evaluation metrics used and explains the motivation for choosing these metrics. (*yes / partial / no*)
  - This paper states the number of algorithm runs used to compute each reported result. (*yes / no*)
  - Analysis of experiments goes beyond single-dimensional summaries of performance to include measures of variation, confidence, or other distributional information. (*yes / no*)
  - The significance of any improvement or decrease in performance is judged using appropriate statistical tests (e.g., Wilcoxon signed-rank). (*yes / partial / no*)
  - This paper lists all final (hyper-)parameters used for each model/algorithm in the paper's experiments. (*yes / partial / no / NA*)