

## The Machine Learning Reproducibility Checklist (Version 1.2, Mar.27 2019)

For all **models** and **algorithms** presented, check if you include:

- A clear description of the mathematical setting, algorithm, and/or model.
- An analysis of the complexity (time, space, sample size) of any algorithm.
- A link to a downloadable source code, with specification of all dependencies, including external libraries.

For any **theoretical claim**, check if you include:

- A statement of the result.
- A clear explanation of any assumptions.
- A complete proof of the claim.

For all **figures** and **tables** that present empirical results, check if you include:

- A complete description of the data collection process, including sample size.
- A link to a downloadable version of the dataset or simulation environment.
- An explanation of any data that were excluded, description of any pre-processing step.
- An explanation of how samples were allocated for training / validation / testing.
- The range of hyper-parameters considered, method to select the best hyper-parameter configuration, and specification of all hyper-parameters used to generate results.
- The exact number of evaluation runs.
- A description of how experiments were run.
- A clear definition of the specific measure or statistics used to report results.
- Clearly defined error bars.
- A description of results with central tendency (e.g. mean) & variation (e.g. stddev).
- A description of the computing infrastructure used.

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**Figure 9:** The Machine Learning Reproducibility Checklist, version 1.2, used during the NeurIPS 2019 review process.