Responsible NLP Checklist

Paper title: *1+1>2: A Synergistic Sparse and Low-Rank Compression Method for Large Language Models*
Authors: *Zeliang Zong, Kai Zhang, Zheyang Li, Wenming Tan, Ye Ren, yiyan zhai, Jilin Hu*

> How to read the checklist symbols:
>
> ☑ the authors responded 'yes'
>
> ☒ the authors responded 'no'
>
> N/A the authors indicated that the question does not apply to their work
>
> ☐ the authors did not respond to the checkbox question
>
> For background on the checklist and guidance provided to the authors, see the Responsible NLP Checklist page at ACL Rolling Review.

☑ A. Questions mandatory for all submissions.

☑ A1. Did you describe the limitations of your work?
This paper has a Limitations section.

☑ A2. Did you discuss any potential risks of your work?
Appendix F ("Potential Risks")

☑ B. Did you use or create scientific artifacts? (e.g. code, datasets, models)

☑ B1. Did you cite the creators of artifacts you used?
Section 1 ("Model Citations"); Appendix B ("Datasets and Benchmarks Citations"); Appendix C ("Accelerator Citations")

☑ B2. Did you discuss the license or terms for use and/or distribution of any artifacts?
Appendix B.3 ("Licensing and Distribution Terms")

☑ B3. Did you discuss if your use of existing artifact(s) was consistent with their intended use, provided that it was specified? For the artifacts you create, do you specify intended use and whether that is compatible with the original access conditions (in particular, derivatives of data accessed for research purposes should not be used outside of research contexts)?
Appendix B.3 ("Compliance with Intended Use")

☒ B4. Did you discuss the steps taken to check whether the data that was collected/used contains any information that names or uniquely identifies individual people or offensive content, and the steps taken to protect/anonymize it?
The data we used dont contains personally identifying info or offensive content.

☒ B5. Did you provide documentation of the artifacts, e.g., coverage of domains, languages, and linguistic phenomena, demographic groups represented, etc.?
We relied exclusively on the original datasets publicly available documentationwhich thoroughly covers domains, languages, and author demographicsso we refer readers to that source rather than duplicating it in our paper.

☒ B6. Did you report relevant statistics like the number of examples, details of train/test/dev splits, etc. for the data that you used/created?
We relied exclusively on the original datasets publicly available documentationwhich thoroughly

covers the number of examples, details of train/test/dev splitsso we refer readers to that source rather than duplicating it in our paper.

☑ **C. Did you run computational experiments?**

☑ C1. Did you report the number of parameters in the models used, the total computational budget (e.g., GPU hours), and computing infrastructure used?
Appendix B.2 ("Model Size"); Limitations ("Computational Budget")

☑ C2. Did you discuss the experimental setup, including hyperparameter search and best-found hyperparameter values?
Section 5.3 & Appendix B & Appendix E("Experimental Setup & Hyperparameter Search & Best-found Hyperparameter")

☑ C3. Did you report descriptive statistics about your results (e.g., error bars around results, summary statistics from sets of experiments), and is it transparent whether you are reporting the max, mean, etc. or just a single run?
Appendix E.3 ("Summary Statistics from Sets of Experiments and the Mean Results Reported")

☑ C4. If you used existing packages (e.g., for preprocessing, for normalization, or for evaluation, such as NLTK, SpaCy, ROUGE, etc.), did you report the implementation, model, and parameter settings used?
Appendix B.3 ("Existing Packages for Evaluation Reported")

☒ **D. Did you use human annotators (e.g., crowdworkers) or research with human subjects?**

☒ D1. Did you report the full text of instructions given to participants, including e.g., screenshots, disclaimers of any risks to participants or annotators, etc.?
We used only publicly available, pre-annotated datasets

N/A D2. Did you report information about how you recruited (e.g., crowdsourcing platform, students) and paid participants, and discuss if such payment is adequate given the participants' demographic (e.g., country of residence)?
(left blank)

N/A D3. Did you discuss whether and how consent was obtained from people whose data you're using/curating (e.g., did your instructions explain how the data would be used)?
(left blank)

N/A D4. Was the data collection protocol approved (or determined exempt) by an ethics review board?
(left blank)

N/A D5. Did you report the basic demographic and geographic characteristics of the annotator population that is the source of the data?
(left blank)

☒ **E. Did you use AI assistants (e.g., ChatGPT, Copilot) in your research, coding, or writing?**

N/A E1. If you used AI assistants, did you include information about their use?
All writing and code were produced manually by authors.