

## Reproducibility checklist

- \* Please make sure these points are addressed in your report submission
- \* Please copy this and replace the ☐ with a ✓ for the items that are addressed in your report/code submission
- \* Please complete this report, attach it to your final project report as the last page and then submit.

### Model Description, algorithm, Mathematical Setting:

- ✓ Include a thorough explanation of the model/approach or the mathematical framework

### Source Code Accessibility:

- ✓ Provide a link to the source code on github.
- ✓ Ensure the code is well-documented
- ✓ Ensure that the github repo has instructions for setting up the experimental environment.
- ✓ Clearly list all dependencies and external libraries used, along with their versions.

### Computing Infrastructure:

- ✓ Detail the computing environment, including hardware (GPUs, CPUs) and software (operating system, machine learning frameworks) specifications used for your results.  
(Example statement 1: the model was fine-tuned using a single T4 GPU on colab.  
Example statement 2: we ran inference of Llama 70B using 4 Nvidia A5000 GPUs)
- ✓ Mention any specific configurations or optimizations used.  
(Example: We used a quantized version of Llama with int8.  
Example 2: We used the regular float32 representation.)

### Dataset Description:

- ✓ Clearly describe the datasets used, including sources, preprocessing steps, and any modifications.
- ✓ If possible, provide links to the datasets or instructions on how to obtain them.

### Hyperparameters and Tuning Process:

- ✓ Detail the hyperparameters used and the process for selecting them.  
(Example: The model was fine-tuned using a batch size of 16, learning rate of 1e-5, and trained on 1000 steps with 100 steps of learning rate linear warmup with linear decay)

### Evaluation Metrics and Statistical Methods:

- ✓ Clearly define the evaluation metrics and statistical methods used in assessing the model.

Experimental Results:

- ✓ Present a comprehensive set of results, including performance on test sets and/or any relevant validation sets.
- ✓ Include comparisons with baseline models and state-of-the-art, where applicable.

Limitations and future work:

- ✓ Include a discussion of the limitations of your approach and potential areas for future work.