

## Responsible NLP Checklist

Paper title: *GENUINE: Graph Enhanced Multi-level Uncertainty Estimation for Large Language Models*

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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.

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### ☒ 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?

*Please refer to the Ethical Consideration and Limitation section where we discuss the ethical considerations.*

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

- ☒ B1. Did you cite the creators of artifacts you used?

*Please see section 5.1 where we provide the dataset references. We follow the open-license agreement for our code.*

- ☐ N/A B2. Did you discuss the license or terms for use and/or distribution of any artifacts?

*All the datasets follow license of the creators and coding is open-source which follows the open-source license agreement.*

- ☒ 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)?

*Please refer to section 5.1 for more details.*

- ☐ N/A 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 datasets we use do not have any offensive content.*

- ☐ N/A B5. Did you provide documentation of the artifacts, e.g., coverage of domains, languages, and linguistic phenomena, demographic groups represented, etc.?

*All the datasets follow the documentations of the creators and coding is open-source which follows the open-license agreement.*

- ☒ 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?

*Please see section 5.1 for more details.*

The [Responsible NLP Checklist](#) used at ACL Rolling Review is adopted from [NAACL 2022](#), with the addition of [ACL 2023 question on AI writing assistance](#) and further refinements based on ARR practice.

☒ **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?

*Please see section 5 for the details of LLMs and computation platform we use.*

- ☐ C2. Did you discuss the experimental setup, including hyperparameter search and best-found hyperparameter values?

*Please see section 5.1 for the details of experimental setup and the appendix B for parameter analysis.*

- ☒ 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?

*Please refer to section 5 and the appendix B for experimental results that contains error bars.*

- ☒ 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?

*Please see section 5.1 for the use of ROUGE packages.*

☒ **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 do not include any human subjects in our paper.*

- ☐ 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)?

*We do not include any human subjects in our paper.*

- ☐ 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)?

*We do not include any human subjects in our paper.*

- ☐ D4. Was the data collection protocol approved (or determined exempt) by an ethics review board?

*We do not include any human subjects in our paper.*

- ☐ D5. Did you report the basic demographic and geographic characteristics of the annotator population that is the source of the data?

*We do not include any human subjects in our paper.*

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

- ☒ E1. If you used AI assistants, did you include information about their use?

*We do not use AI assistants in any parts of our writing and coding.*