

## Responsible NLP Checklist

Paper title: *Meta-Tool: Efficient Few-Shot Tool Adaptation for Small Language Models*

Authors: *Sachin Kumar*

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?

*Yes. The Ethical Considerations section discusses value-neutrality of few-shot learning (the framework learns dangerous operations as readily as benign ones), prompt injection risks via example poisoning, information leakage through prompts, and automation bias from absent uncertainty estimates. We recommend sandboxed execution, human-in-the-loop approval, action allow listing, and audit logging for deployments.*

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

- 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?

*We use only publicly available benchmarks (ToolBench, Gorilla APIBench, Spider 2.0, WebArena, InterCode) that do not contain personally identifying information. All benchmarks are established academic datasets with no offensive content.*

- 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 report success rates as point estimates from single runs on 50 tasks per benchmark.*

### C. Did you run computational experiments?

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

*Yes, detailed in 4 and Appendices AF. Base model: Llama-3.2-3B-Instruct (4-bit NF4, 4096 context). LoRA:  $r=16, =32$ , targeting  $q/k/v\_proj$  across 7 layers. Hypernetwork: 227.8M parameters with MiniLM-L6-v2 encoder. Greedy decoding, 64 max new tokens, seed 42. Evaluated on 50 tasks 4 benchmarks. Hardware: RTX 4090 (24GB). Full prompt templates and code released at <https://github.com/techsachinkr/Meta-Tool>*

- 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,

---

*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. ACL 2026 used a subset of ARR checklist form.*

etc. or just a single run?

*We report success rates as point estimates from single runs on 50 tasks per benchmark.*

**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.?

*(left blank)*

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)*

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)*

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

*(left blank)*

**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?

*(left blank)*