Review 1

PC member: Raphaël Hierso-Iglesias
Time: Nov 20, 15:46 UTC

Review

(1) This study is conducted within a partnership between IMT and Dassault and focuses on the use of LLMs for automotive engineering. The extended abstract clearly states that the work aims at fine-tuning pre-trained LLMs on automotive-specific datasets and exploring how such models can be integrated into the existing engineering environment. The proposed methodology is structured around three steps: fine-tuning, integration, and contextual learning. The expected outcome is a proof-of-concept for an LLM-powered assistant to support the design of automotive embedded systems. The authors also highlight potential benefits, such as reducing time-consuming, non-creative tasks and improving documentation, while acknowledging remaining challenges related to confidentiality and interpretability.

(2) The main takeaways are clear and easy to understand. The summary, the statement of the aim, and the discussion are well aligned and relevant. References are provided and help to situate the work in the broader context. It is particularly useful that the authors explicitly position their contribution as a proof of concept, which sets realistic expectations regarding scope and maturity.

(3) However, the methodology remains too vague at this stage. It is difficult to understand which models will actually be used (only those cited in the related work, or others?), and the description of the experimental phase lacks detail on the planned tests and evaluation protocol (will they reuse the benchmarks from the cited papers, or define new ones?). Some claims are generic and not sufficiently supported (e.g. “rapidly evolving”, “recent advances”). Slightly deeper contextualization and a more explicit use of the cited work (for instance regarding human-in-the-loop aspects) would strengthen the proposal.

(4) Overall, the text is well written, with no major presentation issues. The frequent use of bullet points is not problematic, but the argumentation could be smoother with more connectors and slightly longer, more developed paragraphs. This would improve the readability and give the extended abstract a more cohesive narrative flow.

Reviewer's confidence

2: Partly, I may be missing some concepts or elements of the state-of-the art, but I got the main idea

Usage of LLM

2: Yes, a bit

Confidential remarks for the program committee

(None provided)