Have large-language models (LLMs) made previous Al tools obsolete?

AIRE'24 Joint Activity

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Goal

Pre-LLM era

LLM era

Conscious, specific design



Out-of-the-box usability

Manual data curation and training



Requiring a few examples

Decent results, but rarely any adoption



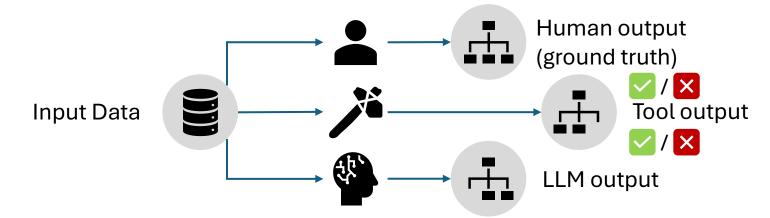
Be

Better/worse performance?

→ Have large-language models made previous AI tools obsolete?

Method Overview

- **1. Select a study** that presents an AI-powered tool performing an RE task (e.g., from the <u>AIRE</u> or <u>NLP4RE</u> workshops)
- 2. Select data from the evaluation of that tool



- 3. Engineer a prompt for the LLM of your choice that performs the same task
- **4. Reflect** on the strengths and weaknesses of the LLM Finally, we discuss the results

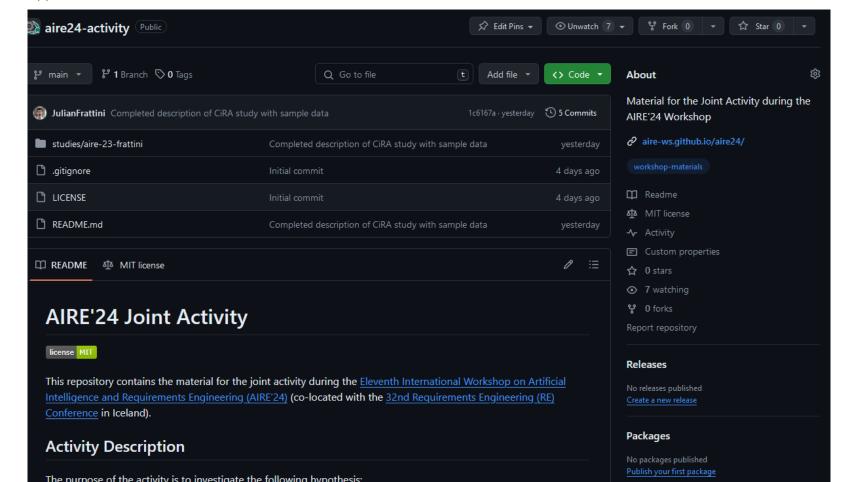
Preconditions

Minimum preconditions:

- 1. Access to an **LLM/GenAI** (e.g., <u>ChatGPT</u>) of your choice Optional preconditions:
- 2. Account at GitHub for accessing the material
- 3. Working local git setup to store your solution

Material available on GitHub

aire-ws/aire24-activity Public



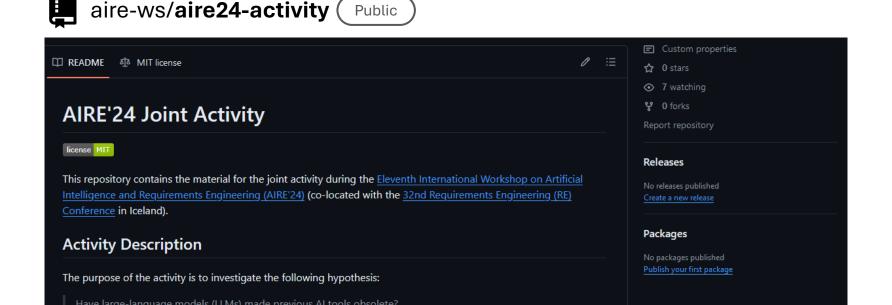
Process

- 1. Fork the repository https://github.com/aire-ws/aire24-activity
- 2. Select a study presenting a tool
 - 1. When selecting an unfamiliar, prepared tool from the repository: **read the summary** of its use case in the respective *README.md* file.
 - 2. When selecting an own tool: **copy** the *template/* directory under *studies/* and name it after your study
- 3. Select an LLM and enter the name and version to the activity-report.md
- **4. Develop a prompt** that performs the tool's task with the input data in the *data.md* file
- 5. Report your prompt in the activity-report.md

Execute

Perform the task by following the steps (1) Select a study, (2) select data, (3) engineer a prompt, and (4) reflect.

The public material on GitHub also contains the activity description in more detail.



Discussion

Have large-language models made previous AI tools obsolete?

- What were the strengths of the LLM?
- What were the weaknesses of the LLM?

Thank you for your participation

We welcome constructive feedback

