Package 'hollr'

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Type Package

Title Chat Completion and Text Annotation with Local and OpenAI Models

Version 1.0.0

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Description Enables chat completion and text annotation with local and 'OpenAI' <https://openai.com/> language models, supporting batch processing, multiple annotators, and consistent output formats.

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Encoding UTF-8

Depends R (>= 3.5)

Imports data.table, httr, jsonlite, pbapply, reticulate

RoxygenNote 7.3.1

URL https://github.com/jaytimm/hollr

BugReports https://github.com/jaytimm/hollr/issues

NeedsCompilation no

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Contents

`hollr` *LLM Completions*

Description

This function generates text using the OpenAI API or a local model.

Usage

```
hollr(
  id,
  user_message = "",
  annotators = 1,
  model,
  temperature = 1,
  top_p = 1,
  max_tokens = NULL,
  max_length = 1024,
  max_new_tokens = NULL,
  system_message = "",
  force_json = TRUE,
  flatten_json = TRUE,
  max_attempts = 10,
  openai_api_key = Sys.getenv("OPENAI_API_KEY"),
  openai_organization = NULL,
  cores = 1,
  batch_size = 1,
  extract_json = TRUE,
  verbose = TRUE
)
```

Arguments

`id`	A unique identifier for the request.
`user_message`	The message provided by the user.
`annotators`	The number of annotators (default is 1).
`model`	The name of the model to use.
`temperature`	The temperature for the model's output (default is 1).
`top_p`	The top-p sampling value (default is 1).
`max_tokens`	The maximum number of tokens to generate (default is NULL).
`max_length`	The maximum length of the input prompt (default is 1024, for local models only).
`max_new_tokens`	The maximum number of new tokens to generate (default is NULL, for local models only).

system_message	The message provided by the system (default is ”).
force_json	A logical indicating whether the output should be JSON (default is TRUE).
flatten_json	A logical indicating whether the output should be converted to DF (default is TRUE).
max_attempts	The maximum number of attempts to make for generating valid output (default is 10).
openai_api_key	The API key for the OpenAI API (default is retrieved from environment variables).
openai_organization	The organization ID for the OpenAI API (default is NULL).
cores	The number of cores to use for parallel processing (default is 1).
batch_size	The number of batch_size to process (default is 1, only for local models).
extract_json	A logical indicating whether to extract and clean JSON strings from the response (default is TRUE).
verbose	A logical indicating whether to show progress and other messages (default is TRUE).

Value

A data.table containing the generated text and metadata.

Examples

```
# Example using the OpenAI API
if (nzchar(Sys.getenv("OPENAI_API_KEY"))) {
  result <- hollr(id = "example_id",
                  user_message = "What is the capital of France?",
                  model = "gpt-3.5-turbo",
                  openai_api_key = Sys.getenv("OPENAI_API_KEY"))
  print(result)
} else {
  message("OpenAI API key is not available. Example not run.")
}
```

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