Package: kuzco (via r-universe)

December 28, 2024

Title LLM image classification using ollama in R

Version 0.0.1.0

Description This package is a designed to use local models for image classification. The prompts and functions are designed to take an input image and supply classification information as an output.

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Encoding UTF-8

Roxygen list(markdown = TRUE)

RoxygenNote 7.3.2

Imports dplyr, jsonlite, ollamar

Config/pak/sysreqs libssl-dev

Repository https://frankiethull.r-universe.dev

RemoteUrl https://github.com/frankiethull/kuzco

RemoteRef HEAD

RemoteSha b99cf421d4bbed1f9064d6c66c80dc5622b73fe2

Contents

`llm_image_classification` *Image Classification using LLMs*

Description

Image Classification using LLMs

Usage

```
llm_image_classification(
  llm_model = "llava-phi3",
  image = "inst/img/test_img.jpg",
  ...
)
```

Arguments

`llm_model`	a local LLM model pulled from ollama
`image`	a local image path that has a jpeg, jpg, or png
`...`	a pass through for other generate args and model args like temperature

Value

a df with image_classification, primary_object, secondary_object, image_description, image_colors, image_proba_names, image_proba_values

`llm_image_extract_text` *Image OCR for Text Extraction using LLMs*

Description

Image OCR for Text Extraction using LLMs

Usage

```
llm_image_extract_text(
  llm_model = "llava-phi3",
  image = "inst/img/text_img.jpg",
  ...
)
```

Arguments

`llm_model`	a local LLM model pulled from ollama
`image`	a local image path that has a jpeg, jpg, or png
`...`	a pass through for other generate args and model args like temperature. set the temperature to 0 for more deterministic output

Value

a df with text

`llm_image_recognition` *Image Recognition using LLMs*

Description

Image Recognition using LLMs

Usage

```
llm_image_recognition(
  llm_model = "llava-phi3",
  image = "inst/img/test_img.jpg",
  recognize_object = "face",
  ...
)
```

Arguments

`llm_model`	a local LLM model pulled from ollama
`image`	a local image path that has a jpeg, jpg, or png
`recognize_object`	an item you want to LLM to look for
`...`	a pass through for other generate args and model args like temperature. set the temperature to 0 for more deterministic output

Value

a df with object_recognized, object_count, object_description, object_location

`llm_image_sentiment` *Image Sentiment using LLMs*

Description

Image Sentiment using LLMs

Usage

```
llm_image_sentiment(
  llm_model = "llava-phi3",
  image = "inst/img/test_img.jpg",
  ...
)
```

Arguments

`llm_model`	a local LLM model pulled from ollama
`image`	a local image path that has a jpeg, jpg, or png
`...`	a pass through for other generate args and model args like temperature. set the temperature to 0 for more deterministic output

Value

a df with image_sentiment, image_score, sentiment_description, image_keywords

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