Package 'multimolang'

December 1, 2024

Type Package
Title Multimodal Language Analysis Tools
Version 0.1.0
Description Tools for analyzing multimodal language data. Includes dfMaker for processing Open-Pose outputs.
License AGPL-3
Encoding UTF-8
Imports arrow
Suggests testthat (>= 3.0.0), roxygen2
<pre>URL https://github.com/tu_usuario/multimolang</pre>
<pre>BugReports https://github.com/tu_usuario/multimolang/issues</pre>
RoxygenNote 7.3.2
Config/testthat/edition 3
Contents
dfMaker
Index
dfMaker dfMaker Function

Description

'dfMaker' processes and organizes keypoints data generated by OpenPose, compiling multiple JSON files into a structured data frame suitable for further analysis, visualization, or machine learning applications.

2 dfMaker

Usage

```
dfMaker(
  input.folder,
  config.path,
  output.file = NULL,
  output.path = NULL,
  no_save = FALSE,
  fast_scaling = TRUE,
  transformation_coords = c(1, 1, 5, 5)
)
```

Arguments

input.folder Path to the folder containing OpenPose JSON files.

Path to the configuration file. If not provided, the default configuration is used.

Name of the output file. If 'NULL', an auto-generated name is used.

Path to save the output file. If 'NULL', saves in a default directory.

Path to save the output file. If 'NULL', saves in a default directory.

Logical. If 'TRUE', the output is not saved to a file.

Logical. If 'TRUE', uses fast scaling for transformation. Warning: When 'fast_scaling' is 'TRUE', scaling is performed only using pose keypoints ('t_typepoint = 1'), and the secondary vector 'v.j' is not utilized.

transformation_coords

Numeric vector of length 4 that specifies the transformation coordinates. Each element of the vector has a specific role:

- 1. **'t_typepoint'**: Type of keypoints to use. Possible values:
 - (a) '1': Body keypoints (pose).
 - (b) '2': Face keypoints.
 - (c) '3': Left hand keypoints.
 - (d) '4': Right hand keypoints.
 - (e) 'NA': Default keypoint type or automatically determined.
- 2. **'o_point'**: Index of the keypoint used as the **origin** in the new coordinate system.
- 3. 'i_point': Index of the keypoint that defines the primary base vector 'v.i'.
- 4. 'j_point': Index of the keypoint that defines the secondary base vector 'v.j'.
 If 'i_point == j_point', 'v.j' is calculated as a perpendicular vector to 'v.i' (orthonormalization). If 'fast_scaling = TRUE', 'v.j' is not utilized and should be set to 'NA'.

Value

A data frame containing the processed keypoints data.

dfMaker 3

Examples

```
## Not run:
df <- dfMaker(
  input.folder = "path/to/json",
  config.path = "path/to/config.yml",
  output.file = "result.csv",
  output.path = "output/directory",
  no_save = FALSE,
  fast_scaling = TRUE,
  transformation_coords = c(1, 1, 5, 5)
)
## End(Not run)</pre>
```

Index

dfMaker, 1