

Package ‘mathpix’

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Title Support for the 'Mathpix' API (Image to 'LaTeX')

Version 0.3.0

Maintainer Jonathan Carroll <rpkg@jcarroll.com.au>

Description Given an image of a formula (typeset or handwritten) this package provides calls to the 'Mathpix' service to produce the 'LaTeX' code which should generate that image, and pastes it into a (e.g. an 'rmarkdown') document. See <<https://docs.mathpix.com/>> for full details. 'Mathpix' is an external service and use of the API is subject to their terms and conditions.

Depends R (>= 3.3.0)

License GPL (>= 3)

Encoding UTF-8

LazyData true

URL <https://github.com/jonocarroll/mathpix>

BugReports <https://github.com/jonocarroll/mathpix/issues>

Suggests testthat, covr

RoxygenNote 6.0.1.9000

Imports purrr, base64enc, httr, rstudioapi, texPreview, magick

NeedsCompilation no

Author Jonathan Carroll [aut, cre] (<<https://orcid.org/0000-0002-1404-5264>>)

Repository CRAN

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 mathpix

Convert an image of an equation to a 'LaTeX' expression

Description

Given an image file location, mathpix performs the relevant transformations and send the data to the 'Mathpix' API, which returns a 'LaTeX' expression which should generate the typeset equation/expression in that image. When using 'RStudio', the resulting 'LaTeX' expression is automatically inserted into the current rmarkdown document.

Usage

```
mathpix(img, trial = FALSE, insert = TRUE, retry = FALSE)
```

Arguments

img	image to be converted to LaTeX
trial	should the trial API key be used (see Details)?
insert	Should the resulting LaTeX block be inserted into the document (default: TRUE)
retry	If Mathpix is not able to process the image, should we try again with a re-processed image?

Details

I have obtained an API key for use with this app, which I have included. If you have your own API key feel free to save that in your environment (e.g. ~/.Renviron) with the identifiers MATHPIX_APP_ID and MATHPIX_APP_KEY. If this fails for some reason, the trial API key can be used (as found on the mathpix API documentation site). Refer to <https://docs.mathpix.com/> for full details.

Value

(invisibly) the rmarkdown LaTeX equation block

References

<https://mathpix.com/>

Examples

```
mathpix(system.file("extdata", "eq_no_01.png", package = "mathpix"), insert = FALSE)
## returns
## $$\int \frac{4x}{\sqrt{x^2 + 1}} dx \quad \square
```

render_latex	<i>Convert a 'LaTeX' expression to an image (render)</i>
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Description

This calls [texPreview](#) to render a 'LaTeX' expression into an image, either as a temporary file or saved to disk.

Usage

```
render_latex(latex, fileDir = NULL, ...)
```

Arguments

latex	'LaTeX' code to be evaluated. Surround in \$ or \$\$.
fileDir	directory in which to save the image to (defaults to <code>'/tmp/tempfile()'</code>).
...	other options to pass to texPreview .

Value

NULL (invisibly)

Examples

```
## Not run:  
## requires pdflatex  
latex_expression <- "$$\int \frac { 4 x } { \sqrt { x ^ { 2 } + 1 } } d x$$"  
render_latex(latex_expression)  
## End(Not run)
```

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