

# Package: mathpix (via r-universe)

August 27, 2024

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

**Version** 0.6.0

**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 'markdown') 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** 7.2.1

**Imports** purrr, base64enc, httr, rstudioapi, magick, utils

**Repository** <https://jonocarroll.r-universe.dev>

**RemoteUrl** <https://github.com/jonocarroll/mathpix>

**RemoteRef** HEAD

**RemoteSha** 516788dd00c56f826acc180c9c7b22faa9656a9e

## Contents

credentials . . . . .	2
get_api_key . . . . .	2
mathpix . . . . .	2
render_latex . . . . .	3

<b>Index</b>	<b>4</b>
--------------	----------

---

credentials	<i>Detect mathpix credentials</i>
-------------	-----------------------------------

---

**Description**

Checks environmental variables for MATHPIX\_APP\_ID and MATHPIX\_APP\_KEY values.

**Usage**

```
credentials()
```

**Value**

a list of detected credentials (or this package's credentials)

---

get_api_key	<i>Get a mathpix API key</i>
-------------	------------------------------

---

**Description**

Get a mathpix API key

**Usage**

```
get_api_key()
```

**Value**

NULL (invisibly). Used for the side-effect of opening a browser.

---

mathpix	<i>Convert an image of an equation to a 'LaTeX' expression</i>
---------	--

---

**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, insert = TRUE, retry = FALSE)
```

**Arguments**

img	image to be converted to LaTeX
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**

You must save your own API key in your environment (e.g. ~/.Renvirom) with the identifiers MATHPIX\_APP\_ID and MATHPIX\_APP\_KEY. This can be tested with `mathpix::credentials()`.

**Value**

(invisibly) the rmarkdown LaTeX equation block

**References**

<https://mathpix.com/>

---

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

---

**Description**

This calls `tex_preview` 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 <code>tex_preview</code> .

**Value**

NULL (invisibly)

# Index

`credentials`, 2

`get_api_key`, 2

`mathpix`, 2

`render_latex`, 3