

Mathpix API in Mathematica

10 commits

1 branch

0 packages

4 releases

1 contributor

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GalAsterSupport GithubInstallLatest commit 5eb74cd on Dec 25, 2019

Kernel	fix paclet init	14 months ago
.gitignore	pack to a paclet	14 months ago
Mathpix.m	Support GithubInstall	last month
PacletInfo.m	Support GithubInstall	last month
Readme.md	Support GithubInstall	last month

Readme.md

# Mathpix

Use paclet manager to install the latest version:

```
ResourceFunction["GitHubInstall"] ["GalAster", "Mathpix"]
```

Apply for your API Key from <https://dashboard.mathpix.com/signup>, with one thousand free credits per month

Then set your key and load the function:

```
PersistentValue["Mathpix", "Local"]={"$KeyName", "$KeyValue"};
```

## Usage

Mathpix receives a `Image`, or the `String` of path to the image, or `MathpixAPI` object.

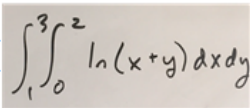
And have the following modes: `{N, D, E, Text, "Raw"}`.

## NormalMode

```
In[ ]:= log p_theta(x) = log p_theta(z) + Sum_{i=1}^K log|det( (partial f_i)/(partial h_{i-1}) )| // Mathpix
```

```
Out[ ]:= \log p_{\theta} (x) = \log p_{\theta} (z) + \sum_{i = 1}^K \log | \operatorname{det} ( \frac { \partial f_{i} } { \partial h_{i - 1} } ) |
```

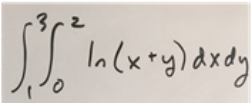
## DisplayMode

```
In[ ]:= display = Mathpix[
```

```
Out[ ]:= DisplayForm=
```

$$\int_1^3 \int_0^2 \ln(x+y) \, dx \, dy$$

## ExpressionMode

▲ In[ ]:= `expr = Mathpix[`

Out[ ]//InputForm=

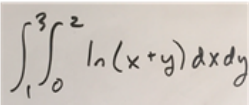
```
HoldComplete[Integrate[Log[x + y], {y, 1, 3}, {x, 0, 2}]]
```



▲ In[ ]:= `ReleaseHold@expr`

Out[ ]//InputForm=

```
-6 - 9*Log[3] + (25*Log[5])/2
```

## RawMode

In[ ]:= `Mathpix[`

▲ In[ ]:= ` MathpixAPI // `

Out[ ]:= <|

```
"latex" -> "\\int _ { 1 } ^ { 3 } \\int _ { 0 } ^ { 2 } \\ln ( x + y ) d x d y",
"latex_confidence_rate" -> 0.999979,
"detection_map" -> <|
  "is_not_math" -> 0.0003,
  "is_inverted" -> 0,
  "contains_table" -> 0,
  "contains_chart" -> 0,
  "contains_graph" -> 0,
  "contains_diagram" -> 0,
  "is_blank" -> 0.0003,
  "is_printed" -> 0
|>,
"detection_list" -> {},
"position" -> <|"width" -> 346,
  "top_left_x" -> 0, "top_left_y" -> 13, "height" -> 130|>,
"latex_confidence" -> 0.999283,
"latex_list" ->
{"\\int _ { 1 } ^ { 3 } \\int _ { 0 } ^ { 2 } \\ln ( x + y ) d x d y"},
"mathml" ->
"<math><semantics><mrow><msubsup><mo>â</mo><mrow><mn>1</mn></mrow><mrow><mn>3</mn></mrow></msubsup><msubsup><mo>â</mo><mrow><mn>0</mn></mrow><mrow><mn>2</mn></mrow></msubsup><mi>ln</mi><mo>(</mo><mi>x</mi><mo>+</mo><mi>y</mi><mo>)</mo><mi>d</mi><mi>x</mi><mi>d</mi><mi>y</mi></mrow><annotation encoding='\"application/x-tex\"'>\\int _ { 1 } ^ { 3 } \\int _ { 0 } ^ { 2 } \\ln ( x + y ) d x d y</annotation></semantics></math>",
"wolfram" -> "\\int_(1)^3 \\int_(0)^2 ln (x+y) dx dy",
"error" -> ""
|>
```