

# Package ‘ggimage’

September 29, 2021

**Title** Use Image in 'ggplot2'

**Version** 0.3.0

**Description** Supports image files and graphic objects to be visualized in 'ggplot2' graphic system.

**Depends** R (>= 3.4.0), ggplot2

**Imports** ggfun, ggplotify, grid, jsonlite, magick, methods, scales, tibble, tools, utils

**Suggests** ape, ggtree, gridGraphics, httr, rsvg

**ByteCompile** true

**License** Artistic-2.0

**URL** <https://github.com/GuangchuangYu/ggimage> (devel),  
<https://yulab-smu.top/pkgdocs/ggimage.html> (vignette)

**BugReports** <https://github.com/GuangchuangYu/ggimage/issues>

**Encoding** UTF-8

**RoxygenNote** 7.1.1

**NeedsCompilation** no

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**Repository** CRAN

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download_phylopic	<i>download_phylopic</i>
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## Description

download phylopic images

## Usage

```
download_phylopic(id, destdir = ".", ...)
```

## Arguments

id	phylopic id
destdir	directory where the downloaded images are to be saved.
...	additional parameters passed to download.file

## Details

This function allows users to download phylopic images using phylopic id

## Value

a character string (or vector) with downloaded file path

## Author(s)

Guangchuang Yu

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draw_key	<i>key drawing function</i>
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**Description**

key drawing function

**Usage**

```
draw_key_image(data, params, size)
```

**Arguments**

data	A single row data frame containing the scaled aesthetics to display in this key
params	A list of additional parameters supplied to the geom.
size	Width and height of key in mm

**Value**

A grid grob

---

geom_bgimage	<i>geom_bgimage</i>
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**Description**

add image as background to plot panel.

**Usage**

```
geom_bgimage(image)
```

**Arguments**

image	image file
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**Value**

ggplot

**Author(s)**

Guangchuang Yu

---

geom_emoji	<i>geom_emoji</i>
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---

## Description

geom layer for using emoji image

## Usage

```
geom_emoji(  
  mapping = NULL,  
  data = NULL,  
  inherit.aes = TRUE,  
  na.rm = FALSE,  
  by = "width",  
  ...  
)
```

## Arguments

mapping	aes mapping
data	data
inherit.aes	whether inherit aes mapping from ggplot()
na.rm	whether remove NA values
by	one of 'width' or 'height' for specifying size
...	additional parameter

## Value

ggplot2 layer

## Author(s)

guangchuang yu

---

geom_flag	<i>geom_flag</i>
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### Description

geom layer for using flag image

### Usage

```
geom_flag(  
  mapping = NULL,  
  data = NULL,  
  inherit.aes = TRUE,  
  na.rm = FALSE,  
  by = "width",  
  ...  
)
```

### Arguments

mapping	aes mapping
data	data
inherit.aes	whether inherit aes mapping from ggplot()
na.rm	whether remove NA values
by	one of 'width' or 'height' for specifying size
...	additional parameter

### Value

ggplot2 layer

### Author(s)

Guangchuang Yu

---

geom_icon	<i>geom_icon</i>
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### Description

geom layer for using icon

### Usage

```
geom_icon(  
  mapping = NULL,  
  data = NULL,  
  inherit.aes = TRUE,  
  na.rm = FALSE,  
  by = "width",  
  ...  
)
```

### Arguments

mapping	aes mapping
data	data
inherit.aes	whether inherit aes mapping from ggplot()
na.rm	whether remove NA values
by	one of 'width' or 'height' for specifying size
...	additional parameter

### Value

ggplot2 layer

### Author(s)

guangchuang yu

---

geom_image	<i>geom_image</i>
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---

## Description

geom layer for visualizing image files

## Usage

```
geom_image(  
  mapping = NULL,  
  data = NULL,  
  stat = "identity",  
  position = "identity",  
  inherit.aes = TRUE,  
  na.rm = FALSE,  
  by = "width",  
  nudge_x = 0,  
  ...  
)
```

## Arguments

mapping	aes mapping
data	data
stat	stat
position	position
inherit.aes	logical, whether inherit aes from ggplot()
na.rm	logical, whether remove NA values
by	one of 'width' or 'height'
nudge_x	horizontal adjustment to nudge image
...	additional parameters

## Value

geom layer

## Author(s)

Guangchuang Yu

**Examples**

```
## Not run:
library("ggplot2")
library("ggimage")
set.seed(2017-02-21)
d <- data.frame(x = rnorm(10),
                y = rnorm(10),
                image = sample(c("https://www.r-project.org/logo/Rlogo.png",
                                "https://jeroenooms.github.io/images/frink.png"),
                              size=10, replace = TRUE)
                )
ggplot(d, aes(x, y)) + geom_image(aes(image=image))

## End(Not run)
```

---

geom\_phylopic

*geom\_phylopic*


---

**Description**

geom layer for using phylopic image

**Usage**

```
geom_phylopic(
  mapping = NULL,
  data = NULL,
  inherit.aes = TRUE,
  na.rm = FALSE,
  by = "width",
  ...
)
```

**Arguments**

mapping	aes mapping
data	data
inherit.aes	whether inherit aes mapping from ggplot()
na.rm	whether remove NA values
by	one of 'width' or 'height' for specifying size
...	additional parameter

**Value**

ggplot2 layer



**Author(s)**

Guangchuang Yu

---

`geom_pokemon`*geom\_pokemon*

---

**Description**

geom layer for using pokemon image

**Usage**

```
geom_pokemon(  
  mapping = NULL,  
  data = NULL,  
  inherit.aes = TRUE,  
  na.rm = FALSE,  
  by = "width",  
  ...  
)
```

**Arguments**

<code>mapping</code>	aes mapping
<code>data</code>	data
<code>inherit.aes</code>	whether inherit aes mapping from <code>ggplot()</code>
<code>na.rm</code>	whether remove NA values
<code>by</code>	one of 'width' or 'height' for specifying size
<code>...</code>	additional parameter

**Value**

ggplot2 layer

**Author(s)**

guangchuang yu

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geom_subview	<i>geom_subview</i>
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**Description**

subview geom

**Usage**

```
geom_subview(  
  mapping = NULL,  
  data = NULL,  
  width = 0.1,  
  height = 0.1,  
  x = NULL,  
  y = NULL,  
  subview = NULL  
)
```

**Arguments**

mapping	aes mapping, requires 'x', 'y' and 'subview'
data	data frame
width	width
height	height
x	x position of subview. This parameter works if mapping and data is not provided
y	y position of subview. This parameter works if mapping and data is not provided
subview	subview to plot, if not provided in data and specify by mapping

**Value**

layer

**Author(s)**

guangchuang yu

---

geom\_twitchemote      *geom\_twitchemotes*

---

**Description**

geom layer for using Twitch emotes

**Usage**

```
geom_twitchemote(  
  mapping = NULL,  
  data = NULL,  
  inherit.aes = TRUE,  
  na.rm = FALSE,  
  by = "width",  
  ...  
)
```

**Arguments**

mapping	aes mapping
data	data
inherit.aes	whether inherit aes mapping from ggplot()
na.rm	whether remove NA values
by	one of 'width' or 'height' for specifying size
...	additional parameter

**Value**

ggplot2 layer

**Author(s)**

Brendan Rocks

---

geom\_worldcup2018      *geom\_worldcup2018*

---

**Description**

geom layer for wordcup 2018

**Usage**

```
geom_worldcup2018(
  mapping = NULL,
  data = NULL,
  inherit.aes = TRUE,
  na.rm = FALSE,
  by = "width",
  ...
)
```

**Arguments**

mapping	aes mapping
data	data
inherit.aes	whether inherit aes mapping from <code>ggplot()</code>
na.rm	whether remove NA values
by	one of 'width' or 'height' for specifying size
...	additional parameter

**Value**

ggplot2 layer

**Author(s)**

Guangchuang Yu

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ggbackground	<i>ggbackground</i>
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**Description**

set background for ggplot

**Usage**

```
ggbackground(gg, background, ...)
```

**Arguments**

gg	gg object
background	background image
...	additional parameter to manipulate background image, see also <code>geom_image</code>

**Value**

gg object

**Author(s)**

guangchuang yu

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<code>image_read2</code>	<i>image_read2</i>
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**Description**

read image (by `magick::image_read`) with the ability to remove marginal empty space

**Usage**

```
image_read2(path, ..., cut_empty_space = TRUE)
```

**Arguments**

<code>path</code>	file path
<code>...</code>	additional parameters that pass to <code>magick::image_read</code>
<code>cut_empty_space</code>	whether remove marginal empty space

**Value**

magick-image object

**Author(s)**

Guangchuang Yu

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<code>list.flag</code>	<i>list.flag</i>
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---

**Description**

list available flag

**Usage**

```
list.flag()
```

**Value**

flag vector

**Author(s)**

Guangchuang Yu

---

`list.icon`

*list.icon*

---

**Description**

list available icon

**Usage**

`list.icon()`

**Value**

icon vector

**Author(s)**

guangchuang yu

---

`list.pokemon`

*list.pokemon*

---

**Description**

list available pokemon

**Usage**

`list.pokemon()`

**Value**

pokemon vector

**Author(s)**

guangchuang yu

---

`list.worldcup2018`      *list.worldcup2018*

---

**Description**

list flags of worldcup 2018

**Usage**

`list.worldcup2018()`

**Value**

flag vector

**Author(s)**

Guangchuang Yu

---

`phylopic_uid`      *phylopic\_uid*

---

**Description**

query phylopic to get uid from scientific name

**Usage**

`phylopic_uid(name)`

**Arguments**

name                  scientific name

**Value**

phylopic uid

**Author(s)**

Guangchuang Yu

theme\_nothing      *theme\_nothing*

---

**Description**

A theme that only show the plot panel

**Usage**

```
theme_nothing(base_size = 11, base_family = "")
```

**Arguments**

base\_size      font size  
base\_family    font family

**Value**

ggplot2 theme

**Author(s)**

Guangchuang Yu

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theme\_transparent      *theme\_transparent*

---

**Description**

transparent background theme

**Usage**

```
theme_transparent(...)
```

**Arguments**

...              additional parameter to tweak the theme

**Value**

ggplot object

**Author(s)**

Guangchuang Yu with contributions from Hugo Gruson



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