

# Package ‘ggimage’

April 2, 2023

**Title** Use Image in 'ggplot2'

**Version** 0.3.2

**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, withr

**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** 7.2.3

**NeedsCompilation** no

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**Repository** CRAN

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autocomplete_name	<i>autocomplete_name</i>
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## Description

obtain suggestions for full names based on partial text name

## Usage

```
autocomplete_name(name, ...)
```

## Arguments

name	partial text name
...	additional parameters

## Value

scientific name

---

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

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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

*geom\_flag*

---

**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

*geom\_icon*

---

**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 ggplot()
<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

---

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

---

ggpreview

*ggpreview*

---

**Description**

preview a plot before saving it to a file.

**Usage**

```
ggpreview(  
  filename = NULL,  
  plot = last_plot(),  
  width = NA,  
  height = NA,  
  units = "in",  
  ...  
)
```

**Arguments**

filename	If it is not NULL, the previewed figure will be saved to the file
plot	any plot that is supported by the 'ggplotify' package
width	width of the figure
height	height of the figure
units	units of the 'width' and 'height'
...	additional parameters passed to ggsave() if filename is not NULL

**Value**

a preview of the figure

**Author(s)**

Guangchuang Yu

---

image_read2	<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**

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

**Value**

magick-image object

**Author(s)**

Guangchuang Yu

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list.flag	<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, seed = 123)
```

**Arguments**

<code>name</code>	scientific name
<code>seed</code>	The random seed to use to generate the same uid, because a name might have many uid, the function will extract one of them randomly, default is 123.

**Value**

phylopic uid

**Author(s)**

Guangchuang Yu



---

theme_nothing	<i>theme_nothing</i>
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---

**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	<i>theme_transparent</i>
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---

**Description**

transparent background theme

**Usage**

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

**Arguments**

...	additional parameter to tweak the theme
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**Value**

ggplot object

**Author(s)**

Guangchuang Yu with contributions from Hugo Gruson

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