# R Function A Day

Indrajeet Patil

2025 - 01 - 26

# Contents

About																		17
January 2021																		19
January 24												 						19
January 25												 						19
January 26												 						19
January 27												 						19
January 28												 						20
January 29												 						20
January 30												 						20
January 31												 					•	20
																		21
February 202	1																	41
February 202 February 1												 						21
·																		
February 1												 		•		•		21
February 1 February 2									•		•	 						21 21
February 1 February 2 February 3												 						21 21 21
February 1 February 2 February 3 February 4		 				 	 	 	 		 	 21 21 21 21 21						
February 1 February 2 February 3 February 4 February 5		 		 		 	 	 	 		 	 21 21 21 21 21 22						
February 1 February 2 February 3 February 4 February 5 February 6		 		 		 	 	 	 		 	 21 21 21 21 21 22 22						
February 1 February 2 February 3 February 4 February 5 February 6 February 7		 		 			 	 	 		 	 21 21 21 21 22 22 22						

]	February 1	11.											 				23
]	February 1	2											 				23
]	February 1	3											 				23
]	February 1	4											 				24
]	February 1	15											 				24
]	February 1	6											 				24
]	February 1	17											 				24
]	February 1	18											 				25
]	February 1	9											 				25
]	February 2	20											 				25
]	February 2	21											 				25
]	February 2	22											 				25
]	February 2	23											 				26
]	February 2	24															26
]	February 2	25											 				26
]	February 2	26											 				26
]	February 2	27											 				26
]	February 2	28											 				27
Ma	rch 2021																29
	March 1.																<b>29</b> 29
	March 2.																29
	March 3.																29 29
	March 4.																29
	March 5.																30
																	30
	March 7.																30
	March 8.																30
	March 9.																31
	March 10																31
	March 11																31

CONTENTS	5
----------	---

March 12	31
March 13	31
March 14	32
March 15	32
March 16	32
March 17	32
March 18	33
March 19	33
March 20	33
March 21	33
March 22	33
March 23	34
March 24	34
March 25	34
March 26	34
March 27	35
March 28	35
March 29	35
March 30	35
March 31	35
April 2021	37
April 1	37
April 2	37
April 3	37
April 4	38
April 5	38
April 6	38
April 7	38
April 8	38
April 9	39
•	

6	CONTENTS

	April 10	 	 	 		 	 				 . 39
	April 11	 	 	 		 	 				 . 39
	April 12	 	 	 		 	 				 . 39
	April 13	 	 	 		 	 				 . 40
	April 14	 	 	 		 	 				 . 40
	April 15	 	 	 		 	 				 . 40
	April 16	 	 	 		 	 				 . 40
	April 17	 	 	 		 	 				 . 40
	April 18	 	 	 		 	 				 . 41
	April 19	 	 	 		 	 				 . 41
	April 20	 	 	 		 	 				 . 41
	April 21	 	 	 		 	 				 . 41
	April 22	 	 	 		 	 				 . 42
	April 23	 	 	 		 	 				 . 42
	April 24	 	 	 		 	 				 . 42
	April 25	 	 	 		 	 				 . 42
	April 26	 	 	 		 	 				 . 42
	April 27	 	 	 		 	 				 . 43
	April 28	 	 	 		 	 				 . 43
	April 29	 	 	 		 	 				 . 43
	April 30	 	 	 		 	 				 . 43
Ma	ay 2021										45
	May 1 .	 	 	 		 	 	 			
	May 2 .										
	May 3 .										
	May 4 .										
	May 5 .										
	May 6 .										
	May 7 .	 	 	 		 	 	 			
	May 8 .	 	 	 		 	 	 			 . 47
	*										

CONTENTS	7
----------	---

	May 9 .																																			47
	May 10																																			47
	May 11																																			47
	May 12																																			47
	May 13																																			48
	May 14																																			48
	May 15																																			48
	May 16																																			48
	May 17																																			49
	May 18																																			49
	May 19																																			49
	May 20																																			49
	May 21																																			49
	May 22																																			50
	May 23																																			50
	May 24																																			50
	May 25																																			50
	May 26																																			51
	May 27																																			51
	May 28																																			51
	May 29																																			51
	$\mathrm{May}\ 30$																																			51
	May 31																																			52
Tu	ne 2021																																			53
50	June 1 .																																			53
	June 2.																																			53
	June 3.																																			53
	June 4.																																			54
	June 5.																																			54
	June 6	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	54

	June $7$ .																 																54
	June 8 .																 																54
	June 9 .																 																55
	June 10																 																55
	June 11																 																55
	June 12																 																55
	June 13																 																56
	June 14																 																56
	June 15																 																56
	June 16																 																56
	June 17																 																56
	June 18																 																57
	June 19																 																57
	June 20																 																57
	June 21																 																57
	June 22																 																58
	June 23																 																58
	June 24																 																58
	June 25																 																58
	June 26																 																59
	June 27																 																59
	June 28																 																59
	June 29																 																59
	June 30																 						•										59
ſ.,	ıly 2021																																61
u	-																																
	July 1 .																															•	61
	July 2 .																																61
	July 3 .																																61
	July 4 .	•	٠	٠	•	•	٠	•	•	•	•	•	•	•	•	•	 	•	٠	•	•	•	•	 •	•	•	٠	•	•	•	•	•	62
	111137 5																																62

9

July 6	62
July 7	62
July 8	62
July 9	63
July 10	63
July 11	63
July 12	63
July 13	64
July 14	64
July 15	64
July 16	64
July 17	65
July 18	65
July 19	65
July 20	65
July 21	65
July 22	66
July 23	66
July 24	66
July 25	66
July 26	67
July 27	67
July 28	67
July 29	67
•	67
July 31	68
August 2021	69
· ·	69
	69
	69

August 4	9
August 5	0
August 6	0
August 7	0
August 8	0
August 9	1
August 10	1
August 11	1
August 12	1
August 13	1
August 14	2
August 15	2
August 16	2
August 17	2
August 18	3
August 19	3
August 20	3
August 21	3
August 22	3
August 23	4
August 24	4
August 25	4
August 26	4
August 27	5
August 28	5
August 29	5
August 30	5
August 31	5

11
11

September 2021	77
September 1	77
September 2	77
September 3	77
September 4	78
September 5	78
September 6	78
September 7	78
September 8	78
September 9	79
September 10	79
September 11	79
September 12	79
September 13	80
September 14	80
September 15	80
September 16	80
September 17	80
September 18	81
September 19	81
September 20	81
September 21	81
September 22	82
September 23	82
September 24	82
September 25	82
September 26	82
September 27	83
September 28	83
September 29	83
September 30	83

October 2021																	<b>85</b>
October 1 .																	85
October $2$ .																	85
October 3 .							•										85
October 4 .																	85
October $5$ .																	86
October 6 .																	86
October 7 .																	86
October 8 .																	86
October 9 .																	87
October 10																	87
October 11																	87
October 12																	87
October 13																	87
October 14																	88
October 15																	88
October 16																	88
October 17																	88
October 18																	88
October 19																	89
October 20																	89
October 21																	89
October 22																	89
October 23																	90
October 24																	90
October 25																	90
October 26																	90
October 27																	90
October 28																	91
October 29																	91
October 30																	91
October 31								 									91

November 2021	93
November 1	93
November 2	93
November 3	93
November 4	93
November 5	94
November 6	94
November 7	94
November 8	94
November 9	95
November 10	95
November 11	95
November 12	95
November 13	95
November 14	96
November 15	96
November 16	96
November 17	96
November 18	97
November 19	97
November 20	97
November 21	97
November 22	97
November 23	98
November 24	98
November 25	98
November 26	98
November 27	99
November 28	99
November 29	99
November 30	99

December 2021	101
December $1 \dots$	 . 101
December $2 \ldots \ldots$	 . 101
December $3 \ldots \ldots$	 . 101
December $4 \ldots \ldots$	 . 102
December $5 \dots$	 . 102
December $6 \ldots \ldots$	 . 102
December $7 \ldots$	 . 102
December $8 \ldots \ldots$	 . 102
December $9 \dots$	 . 103
December $10 \dots$	 . 103
December 11	 . 103
December 12	 . 103
December $13 \dots$	 . 104
December 14	 . 104
December 15	 . 104
December 16	 . 104
December 17	 . 104
December 18	 . 105
December 19	 . 105
December $20 \dots$	 . 105
December 21	 . 105
December 22	 . 106
December $23 \dots$	 . 106
December 24	 . 106
December $25 \dots$	 . 106
December 26	 . 106
December 27	 . 107
December 28	 . 107
December 29	 . 107
December $30 \dots$	 . 107
December 31	 . 108

CONTENTS	15
----------	----

January 2022 109
January 1
January 2
January 3
January 4
January 5
January 6
January 7
January 8
January 9
January 10
January 11
January 12
January 13
January 14
January 15
January 16
January 17
January 18
January 19
January 20
January 21
January 22
January 23
January 24
Retirement 115

# About

A book that collects (and provides an easy way to access and search) tweets from R Function A Day account that I created and maintained as a hobby project for 1 year (from 24.01.2021 to 24.01.2022).

There are 365 posts<sup>1</sup> in this book, one for each day.

Note Before

Since the tweets are embedded, the web browser will be slow to load them. So please be patient. Apologies for these performance issues.

If you find that the embedded tweet is assigned to wrong date in the book, or if you wish to add something or change something about the book layout, please file an issue on GitHub.

 $<sup>^1</sup>$ Actually, there are 366 posts to be exact. But I accidentally wrote about one function on two separate occasion, so I count them as one post. It's a fun game to find which one

# January 2021

## January 24

Use {tabyl} function from {janitor} to quickly prepare a frequency table Additionally, you can also use {adorn\_} functions to make the printing even prettier!#RStats #DataScience pic.twitter.com/3BbKO83CSE

— R Function A Day (@rfunctionaday) January 24, 2021

## January 25

Often you might want to make a new column as a combination of a few other columns in a dataframe and {tidyr::unite} is exactly what you are looking for! #rstats #DataScience pic.twitter.com/BeNs5nXz0T

— R Function A Day (@rfunctionaday) January 25, 2021

# January 26

Use the powerful parser functions from  $\{\text{readr}\}\$  to parse a vector into the expected type Helpful with messy, user-entered data where these functions can make educated guesses about what the input was supposed to be.#rstats #DataScience pic.twitter.com/5MGHmEM9Pu

— R Function A Day (@rfunctionaday) January 26, 2021

# January 27

The  $\{\text{model\_performance}\}\$  function from  $\{\text{performance}\}\$  is a quick way to get detailed regression model summary indices for a huge no. of models! https://t.co/vMpMVbz0x5#rstats#DataScience pic.twitter.com/VzPRICbIAg

— R Function A Day (@rfunctionaday) January 27, 2021

## January 28

Tibbles are modern data frames and are ubiquitous in the {tidyverse}. But what if you want to build a tibble from scratch? The {tribble} function provides an intuitive row-by-row syntax to do so! https://t.co/UBRRJLyM47#rstats#DataScience pic.twitter.com/X8KlYkRCTF

— R Function A Day (@rfunctionaday) January 28, 2021

## January 29

Some functions may remove  $\{NA\}$ s in the data by default when one wishes to retain them. $\{replace\_na\}$  from  $\{tidyr\}$  can help here by replacing  $\{NA\}$ s with a specified value  $\frac{https:}{t.co/y4Of3tcexf\#rstats}$ #DataScience pic.twitter.com/XIodtKU7Xn

— R Function A Day (@rfunctionaday) January 29, 2021

## January 30

If you are feeling a bit ambitious and want to understand what is the abstract syntactic structure of your R code, you can use the {ast} function from {lobstr} package to draw a tree representation! https://t.co/WbyECG3a4H#rstats #datascience pic.twitter.com/cgMZDz1vz1

— R Function A Day (@rfunctionaday) January 30, 2021

# January 31

"All work and no play makes Jack a dull boy "So it's important to also have a little fun as part of your #rstats workflows. To that end, you can use  $\{say\}$  function from  $\{cowsay\}$ ! https://t.co/SmDKtEHbMC#rstats #DataScience pic.twitter.com/8AROLW8r3d

— R Function A Day (@rfunctionaday) January 31, 2021

# February 2021

## February 1

The {dplyr} syntax is heavily inspired by #SQL, which means it is easy to translate the {dplyr} code to its equivalent query and this is supported in {dplyr} itself! https://t.co/rjE4S2MK8o#rstats #DataScience pic.twitter.com/SffAhyRmWh

— R Function A Day (@rfunctionaday) February 1, 2021

## February 2

In case you want to peruse how a ggplot (and its various layers) are built, you can use the  $\{ggplot\_build\}$  function from  $\{ggplot2\}$ ! https://t.co/mIq2G3qAo8Useful also to investigate what are the aesthetic defaults for utilized  $\{geom\ \}s.\#rstats\#DataScience\ pic.twitter.com/UnQdpZYCJ8$ 

— R Function A Day (@rfunctionaday) February 2, 2021

# February 3

If you want to get a quick overview of descriptive statistics for a numeric variable, {describe\_distribution} from {parameters} is your friend https://t.co/KlhJNsdL90Also works with a {grouped\_} dataframe from {dplyr} #rstats #DataScience pic.twitter.com/FoBio2p8yk

— R Function A Day (@rfunctionaday) February 3, 2021

# February 4

If you want to see a beautiful, colorful tree of your directory file structure, you can use {dir\_tree} function from {fs} package! https://t.co/UpjcB7z7Qf#rstats

#DataScience pic.twitter.com/SlXAIcePoA

— R Function A Day (@rfunctionaday) February 4, 2021

## February 5

If you work a lot with web scraping and need to extract a particular node from HTML page, {html\_nodes} from {rvest} is your friend https://t.co/ob6beJEkZN#rstats #DataScience pic.twitter.com/kcouQ5rTfC

— R Function A Day (@rfunctionaday) February 5, 2021

## February 6

In a long script, it can become tiresome to keep duplicating the same object name when it is being self-assigned. In such instances, the assignment pipe from {magrittr} proves handy! https://t.co/NVHXfOZOI9#rstats #DataScience pic.twitter.com/3iGuHsUZjG

— R Function A Day (@rfunctionaday) February 6, 2021

# February 7

— R Function A Day (@rfunctionaday) February 7, 2021

# February 8

The {row\_number} function from {dplyr} is a timesaver if you have to create a unique identifier for observations, especially if they belong to different groups 1 2 3 https://t.co/XSagfpLHVg#rstats #DataScience pic.twitter.com/JWb0W2XMjz

— R Function A Day (@rfunctionaday) February 8, 2021

## February 9

Sometimes you just want to extract the source code present in the source document (e.g., Rmd) to a separate script, and {purl} from {knitr} makes that effortless! https://t.co/2lwSJ2HhKG#rstats #DataScience pic.twitter.com/RpqD7zsQst

— R Function A Day (@rfunctionaday) February 9, 2021

## February 10

Often you need to convert country names/codes from different conventions to standardized names, and {countrycode} function from the eponymous can handle most of such conversions! https://t.co/QVF8hBe7BE#rstats #Data-Science pic.twitter.com/RByINBRutU

— R Function A Day (@rfunctionaday) February 10, 2021

## February 11

Sometimes a factor level can be missing implicitly, you can make it explicit using  $\{fct\_explicit\_na\}$  function from  $\{forcats\}$  : https://t.co/GexbNwDl4L#rstats#DataScience pic.twitter.com/7XI2z0cXR8

— R Function A Day (@rfunctionaday) February 11, 2021

# February 12

Cleaning column names so that they have a consistent pattern is probably the first and the most important step in data analysis and {clean\_names} function from {janitor} is peerless in this regard https://t.co/7w14DlhEvA#rstats #DataScience pic.twitter.com/GmmVwHVrOA

— R Function A Day (@rfunctionaday) February 12, 2021

# February 13

The {markdown\_} function family from {commonmark} can help you to convert markdown text into various formats (e.g., latex, html, etc.) https://t.co/kADYv6J4lBCan be a useful tool for teaching, say html,

if one is already comfortable with rmarkdown.#rstats #DataScience pic.twitter.com/AZyxYsPxvX

— R Function A Day (@rfunctionaday) February 13, 2021

## February 14

Some graphics s (e.g. {hrbrthemes}) require special fonts. But it can be a pain to list and interrogate installed fonts. The {system\_fonts} function from {systemfonts} outputs a beautiful richly informative table with a one-line command #rstats #DataScience pic.twitter.com/aTiJdg7gZs

— R Function A Day (@rfunctionaday) February 14, 2021

## February 15

When you just need to create a list of all possible combinations of values in a vector, {combn} function from {utils} comes in handy https://t.co/5tPzuFp1P9#rstats #DataScience pic.twitter.com/RoyLDraNty

— R Function A Day (@rfunctionaday) February 15, 2021

# February 16

When you have to present results from a regression model in a well-formatted table, the  $\{tbl\_regression\}$  function from  $\{gtsummary\}$  will be a serious time-saver https://t.co/EVoZ6ZRbgY#rstats #DataScience pic.twitter.com/q3MvqXIIog

— R Function A Day (@rfunctionaday) February 16, 2021

# February 17

In a deeply nested data structure (an object from JSON, e.g.), indexing can be a bit tedious in base-R.The {pluck} function from {purrr} provides a less tiresome way to index https://t.co/ePJ6HHVKm4#rstats #DataScience pic.twitter.com/nhHEJKjkAu

— R Function A Day (@rfunctionaday) February 17, 2021

## February 18

For comparing performance of different functions, or plain out of curiosity, sometimes we wish to benchmark an expression, and the {mark} function from {bench} makes this very easy! https://t.co/0qP7sY7J9cNote how {cor} is faster than {cor.test}.#rstats #DataScience pic.twitter.com/8AGUg3rE4O

— R Function A Day (@rfunctionaday) February 18, 2021

## February 19

Nothing improves the readability of the code like a style guide, and this is exactly what  $\{style\_^*\}$  function family from  $\{styler\}$  does! The easiest thing to do is to run this function in the directory with your R scripts  $https://t.co/Xjh4j4HuhQ\#rstats\ \#DataScience\ pic.twitter.com/NBhgffztFN$ 

— R Function A Day (@rfunctionaday) February 19, 2021

## February 20

The #rstats has a native  $\{IN\}$  operator but sometimes you might miss the  $\{NOTIN\}$  operator from SQL. The  $\{\%nin\%\}$  operator from  $\{sjmisc\}$  has you covered! https://t.co/7IzXkPxlYD#rstats #DataScience pic.twitter.com/5dpgqHa8Vj

— R Function A Day (@rfunctionaday) February 20, 2021

# February 21

If you are well-versed in SQL and looking to learn {dplyr}, the {show\_dplyr} function from {tidyquery} can be a helpful teaching assistant while translating from a SQL query to equivalent {dplyr} code! https://t.co/gT4ESz4h4y#rstats #DataScience pic.twitter.com/duKYJRuJN0

— R Function A Day (@rfunctionaday) February 21, 2021

# February 22

Although a number of functions tend to have a {data} argument, some don't. For such functions, the pipe operator (%>%) from {magrittr} won't work. In such contexts, one can use the exposition pipe operator (%\$%) https://t.co/1RODRqilaL#rstats#DataScience pic.twitter.com/qxFmzJROKU

— R Function A Day (@rfunctionaday) February 22, 2021

## February 23

The first important step of any data analysis workflow is to make sure that everything about your data "makes sense" and a few other tools out there do as good of a job describing your data as {skim} function from {skimr} !https://t.co/vg3t4v8Ixq#rstats #DataScience pic.twitter.com/FtpFi8ReZY

— R Function A Day (@rfunctionaday) February 23, 2021

## February 24

The infix operator (%||%) from {rlang} can be helpful for having a default value in case it is {NULL} https://t.co/qdMs5VAgjoHelpful for collaborative scripts or functions where users might enter different spellings to specify the same argument.#rstats #DataScience pic.twitter.com/RDeKBpcFD1

— R Function A Day (@rfunctionaday) February 24, 2021

## February 25

Checking association between variables often involves carrying out correlation analysis and a few functions make this as easy as {correlation} from eponymous https://t.co/VGZhhq9L0PSupports a huge variety of correlation methods.#rstats #DataScience pic.twitter.com/piTCGqE5Ek

— R Function A Day (@rfunctionaday) February 25, 2021

# February 26

If you want to conditionally select values in a dataframe, you can use {dplyr::filter}, but what if you want to do the same for a vector or a list?The {keep} function from {purrr} does exactly that! https://t.co/pAXndQ9Pl2#rstats #DataScience pic.twitter.com/6yixL2ZKae

— R Function A Day (@rfunctionaday) February 26, 2021

# February 27

JSON data representation format is ubiquitous and some time we might need to convert our dataframe in R to a JSON object. The {toJSON} function from

{jsonlite} makes this a child's play https://t.co/0lOvOE19EW#rstats #Data-Science pic.twitter.com/PAbVQy4Kiz

— R Function A Day (@rfunctionaday) February 27, 2021

## February 28

When you are working with free-form survey inputs, you need to consider the possibility of mistakes in data entry. In such contexts {stringdist\_join} function from {fuzzyjoin} can save you headache while joining dataframes! https://t.co/HNANB6IjH2#rstats#DataScience pic.twitter.com/b3HT9Soqoa

— R Function A Day (@rfunctionaday) February 28, 2021

# March 2021

## March 1

This one is an oldie but a goodie:The {switch} function from {base} helps you select from a list of alternative actions depending on a condition of interest https://t.co/IYYI1dIvpmNote how, if unspecified, values can trickle down.#rstats #DataScience pic.twitter.com/6iqBh85XMY

— R Function A Day (@rfunctionaday) March 1, 2021

## March 2

In case you want to create a new variable conditional on checking whether values for a different variable lie inside an interval, the {between} function in {dplyr} can be a big help https://t.co/JrEHPo5oDvWorks with date-time objects as well! #rstats #DataScience pic.twitter.com/J5TtCwLBE3

— R Function A Day (@rfunctionaday) March 2, 2021

#### March 3

Sometimes you might wish to know which—some of the unfamiliar functions are from, or where some of the objects in your session are located. The  $\{\text{find}\}\$  function in  $\{\text{base}\}$ —can be helpful here https://t.co/vTvhBnFogF#rstats #Data-Science pic.twitter.com/BG9E8cnS9w

— R Function A Day (@rfunctionaday) March 3, 2021

## March 4

No matter the programming language I code in, I rarely wish to leave the comfort zone of #rmarkdown But how does one check details about the lan-

guages currently supported? Using the {knit\_engine} function from {knitr} https://t.co/bVEzn990dE#rstats #DataScience pic.twitter.com/LCHtsb1b1T

— R Function A Day (@rfunctionaday) March 4, 2021

### March 5

If you are used to creating tibble columns sequentially, you might think a similar procedure works while creating lists, but it doesn't, at least not with {base::list}.You can instead use {lst} function from {tibble}! https://t.co/K97EBCEsYz#rstats#DataScience pic.twitter.com/p152AVXFDb

— R Function A Day (@rfunctionaday) March 5, 2021

### March 6

Most R packages are standing on the shoulders of other packages. In case you are curious to find out which ones, you can use the  $\{\text{plot\_dependencies}\}\$  function from  $\{\text{deepdep}\}\$  for visualizing the said dependence: https://t.co/3tl1A7aMW3#rstats#DataScience pic.twitter.com/dUeHWz3MBA

— R Function A Day (@rfunctionaday) March 6, 2021

#### March 7

Missing values can be troublesome for some statistical analysis and need to be attended to during the data exploration phase. The  $\{vis\_dat\}$  function from  $\{visdat\}$  makes it effortless to glean the structure of missing values https://t.co/ciff6eE06w#rstats#DataScience pic.twitter.com/eM4uJgWApO

— R Function A Day (@rfunctionaday) March 7, 2021

#### March 8

In case you want to access statistics about your system memory without leaving R, you can use the {ps\_system\_memory} function from the {ps} https://t.co/hSVUebKkIGThe measure to watch out for is the available memory.#rstats #DataScience pic.twitter.com/D4YoWLNsku

— R Function A Day (@rfunctionaday) March 8, 2021

#### March 9

Sometimes your data is tabled, i.e. a single row corresponds to multiple observations, not one. To convert it to tidy data, you can untable it using the {uncount} function from {tidyr} https://t.co/LVXog4CWVM#rstats #Data-Science pic.twitter.com/r7tcMVkIFL

— R Function A Day (@rfunctionaday) March 9, 2021

## March 10

Sometimes you have multiple functions that you always use in conjunction and wish you can compose them into a single function. Thanks to {compose} function from {purrr} , you can do exactly that! https://t.co/zdydXfEM35#rstats #DataScience pic.twitter.com/teZ5w65uHS

— R Function A Day (@rfunctionaday) March 10, 2021

## March 11

If you like a certain color from a palette and wish to use it in your plots, you need to find out what's the hexadecimal code for that color. You can use the  $\{\text{show\_col}\}\$  function from  $\{\text{scales}\}\$  to achieve this https://t.co/vxlr8ff035#rstats #DataScience pic.twitter.com/UDN1IFMvO9

— R Function A Day (@rfunctionaday) March 11, 2021

## March 12

If you want to substitute a certain string pattern in data, you can use {gsub}. But what if you wish to do this across files? You can use the {gsub\_file} function from {xfun} to do such substitutions! https://t.co/1PFI7vdRn0#rstats #DataScience pic.twitter.com/09C9GNbKPi

— R Function A Day (@rfunctionaday) March 12, 2021

## March 13

If you have tidy data and wish to carry out operations that require the data to be in wide format, the "spread-operate-retidy" pattern can be a bit cumbersome. The {pairwise\_} function family from {widyr}

makes this less painful: https://t.co/sIcFOKSJSM#rstats #DataScience pic.twitter.com/iaQTtAmzPS

— R Function A Day (@rfunctionaday) March 13, 2021

## March 14

While working with text data, sometimes you can have a long running paragraph that needs to be wrapped so that it is more readable (and pretty). The {str\_wrap} function from {stringr} does the trick! https://t.co/OF9drlXHl0#rstats#DataScience pic.twitter.com/8QVlPZ0vTW

— R Function A Day (@rfunctionaday) March 14, 2021

### March 15

If you have regression model with interaction effect, it can be tricky to visualize the interaction in a statistically informative way. Thankfully, {interplot} has already done that thinking for you in its eponymous function https://t.co/DhhrVrUxyG#rstats#DataScience~pic.twitter.com/rWYxVqnpVV

— R Function A Day (@rfunctionaday) March 15, 2021

#### March 16

In case you are used to the python-style tuple assignment, you can also do something similar in R using the infix operator from  $\{\text{tidytidbits}\}\$   $\text{https://t.co/0g6LDoZfmq\#rstats}\$  DataScience pic.twitter.com/M14Qt9p1rg

— R Function A Day (@rfunctionaday) March 16, 2021

#### March 17

To report posterior distribution of a Bayesian model, you might report a point estimate, uncertainty around it, and an index for importance of the effect. You can do all this using {describe\_posterior} function from {bayestestR} https://t.co/OsEGXjo0Nr#rstats #DataScience pic.twitter.com/68fHWiuOM1

— R Function A Day (@rfunctionaday) March 17, 2021

#### March 18

If you see a beautiful image and think to yourself: "I would really like to use that color palette in my plot!", you can do so! You can extract the color palette from image using the {create\_palette} function from {paletter} https://t.co/uZsB1ovCsf#rstats #DataScience pic.twitter.com/vMIv9eZARJ

— R Function A Day (@rfunctionaday) March 18, 2021

#### March 19

If you wish to include mathematical expressions in a plot/text, but you are more comfortable writing them in LaTeX than in R's plotmath, you can use the  $\{TeX\}$  function from  $\{latex2exp\}$  for a translation! https://t.co/cpyeNcFL1j#rstats #DataScience pic.twitter.com/gRPLIFljTa

— R Function A Day (@rfunctionaday) March 19, 2021

## March 20

When you have to format or interpolate strings using piped data, you can do so easily using the {glue\_data} function from {glue} https://t.co/INusSE9k2u#rstats #DataScience pic.twitter.com/YGgl1ZAGNC

— R Function A Day (@rfunctionaday) March 20, 2021

#### March 21

If you wish to embed a well-formatted HTML table containing a summary of your regression model, the {tab\_model} function from {sjPlot} can do so effortlessly:https://t.co/dtVUrfWVkBSupports simple, mixed-effects, Bayesian, etc. regression models.#rstats #DataScience pic.twitter.com/8wZha5ohNi

— R Function A Day (@rfunctionaday) March 21, 2021

## March 22

It can be a daunting task to construct regular expressions, especially complex ones. The  $\{rx\_\}$  function family from  $\{RVerbalExpressions\}$  makes this more accessible by allowing one to construct regex using verbal expressions https://t.co/5G77171gYA#rstats #DataScience pic.twitter.com/MbLmKSW0KX

— R Function A Day (@rfunctionaday) March 22, 2021

## March 23

If data has hierarchical categories, you may wish to see their breakdown into subcategories (e.g., to check if enough observations per cell for mixed-effects model). You can easily do so using {sizetree} function from {plotrix} !https://t.co/tH5hUetZ2A#rstats#DataScience pic.twitter.com/5d52tK8Mx7

— R Function A Day (@rfunctionaday) March 23, 2021

#### March 24

If you have a list-of-lists, sometimes you may wish to turn it inside out, i.e. convert a pair of lists into a list of pairs. The {transpose} function from {purrr} makes this easy:https://t.co/TBQHC2jw3r#rstats #DataScience pic.twitter.com/7wS8by9ysf

— R Function A Day (@rfunctionaday) March 24, 2021

## March 25

While writing functions, either for a or for colleagues, you can construct an elegant user-interface (UI) using {ui\_} function family from {usethis} https://t.co/PxL3FRV8QkSuch UI provides helpful info, esp. for functions that do multiple things.#rstats #DataScience pic.twitter.com/kCgSLY9gMz

— R Function A Day (@rfunctionaday) March 25, 2021

#### March 26

When you are visualizing data, in addition to plotting the full dataset, you may also wish to emphasize/zoom in on its subset for a special consideration. You can do this easily with the {facet\_zoom} function from {ggforce}! https://t.co/Dm7Lbzv0Pt#rstats #DataScience pic.twitter.com/3EKrTafXRi

— R Function A Day (@rfunctionaday) March 26, 2021

#### March 27

If in the middle of your piped workflow, you wish to access a side effect (e.g., plot or print something) and then continue on with chained operations, you can do so using the tee pipe operator  $\{\%T>\%\}$  from  $\{magrittr\}$ ! https://t.co/ibga7yyf5X#rstats #DataScience pic.twitter.com/5H0MoPOERY

— R Function A Day (@rfunctionaday) March 27, 2021

#### March 28

For correlation hypotheses, in addition to the joint distribution in a scatterplot, one may also wish to visualize the marginal distributions for each variable. This is easy to do using the  $\{ggMarginal\}$  function from  $\{ggExtra\}$  !https://t.co/OgS1XsmY1U#rstats #DataScience pic.twitter.com/wE8mmJwnIx

— R Function A Day (@rfunctionaday) March 28, 2021

## March 29

If you need to convert a vector or a list into a dataframe, you can use the {enframe} function from {tibble} to do this conveniently:https://t.co/dsjo0w5aYDCompare its behavior with that of {data.frame} function to see when you want to prefer it.#rstats #DataScience pic.twitter.com/BxCBR64XF8

— R Function A Day (@rfunctionaday) March 29, 2021

#### March 30

Sometimes you need to display two plots, not in a grid, but one inside the other (aka "inset" plot). Assuming you are using the grammar of graphics approach, this is easy to do using {annotation\_custom} function from {ggplot2} : https://t.co/GTV3UX2XV6#rstats #DataScience pic.twitter.com/cVH9J0dHTJ

— R Function A Day (@rfunctionaday) March 30, 2021

#### March 31

If you need to pad strings, the appropriately named {str\_pad} function from {stringr} makes this effortless https://t.co/Ar7LehWFQlSee examples below

to see all the different ways in which you can do such padding.#rstats #Data-Science pic.twitter.com/TZpXJSWvwv

— R Function A Day (@rfunctionaday) March 31, 2021

# **April 2021**

## April 1

Before accepting regression model estimates, if multicollinearity is problematic (it doesn't necessarily have to be) needs to be checked. The {check\_collinearity} function from {performance} offers pretty way to check this https://t.co/sFMj9vbVIe#rstats#DataScience pic.twitter.com/xdrsVbz40f

— R Function A Day (@rfunctionaday) April 1, 2021

# April 2

Sometimes you wish to visually highlight only a certain portion of the data while retaining the full dataset for reference. The  $\{gghighlight\}$  function from the eponymous helps you do this effortlessly: https://t.co/eibrcjxQ1I#rstats#DataScience pic.twitter.com/TNUFlLnnMs

— R Function A Day (@rfunctionaday) April 2, 2021

# April 3

k-means is a popular clustering algorithm but has a disadvantage (in unsupervised context) that k should be picked in advance. The {kmeansruns} function from {fpc} aids by running k-means over a range of k and returns the best k:https://t.co/bBYsUmhrRz#rstats #DataScience pic.twitter.com/U0ecl17XT0

— R Function A Day (@rfunctionaday) April 3, 2021

### April 4

On a (Easter) Sunday, if you don't want to work but have to, you deserve some light entertainment for yourself. For such occasions, the {kittyR} function from the eponymous can do the trick https://t.co/74vJiwQSAx#rstats #DataScience pic.twitter.com/Cfq5azg6KQ

— R Function A Day (@rfunctionaday) April 4, 2021

### April 5

Often a survey platform might collapse multiple entries of data into a single column which then need to be separated into individual rows. The {separate\_rows} function from {tidy} is designed to make this easy:https://t.co/rESDf7zU3i#rstats #DataScience pic.twitter.com/S1j8cjBaqX

— R Function A Day (@rfunctionaday) April 5, 2021

# April 6

Wordclouds help visualize word frequencies in qualitative work, and a dedicated geom in grammar of graphics framework can give more flexibility to create them. The  $\{ggwordcloud\}$  function from the eponymous provides such a geom https://t.co/mk8DnYJY8p#rstats #DataScience pic.twitter.com/yiwFn7QHiR

— R Function A Day (@rfunctionaday) April 6, 2021

# April 7

As a developer or a user, if you are curious about how your favorite R package has performed (in terms of usage) over years, you can create an informative visualization using the {cranDownloads} function from {packageRank} https://t.co/64DqUbmAFF#rstats #DataScience pic.twitter.com/GPGIgZiDrf

— R Function A Day (@rfunctionaday) April 7, 2021

# April 8

Often when we are reporting quantities (time, information, etc. units), we wish to report them in human-readable form. The {pretty\_} function family from

 $\{prettyunits\}\$ is designed to do exactly this! https://t.co/9QMWvZIODB#rstats#DataScience pic.twitter.com/ZUX6vbRNpF

— R Function A Day (@rfunctionaday) April 8, 2021

### April 9

Factor analysis (FA) can help reduce many features to a few latent features. But one first needs to check if data is suitable for FA. The {check\_factorstructure} function from {parameters} provides an informative and verbose way https://t.co/MNQZMkum30#rstats #DataScience pic.twitter.com/hdeS0w3NJF

— R Function A Day (@rfunctionaday) April 9, 2021

# April 10

For pedagogical, research, etc. purposes, one may sometimes wish to create fake data. The {ch\_} function family from {charlatan} supports creation of different types of data across multiple languages https://t.co/mERCQ6aCzf#rstats#DataScience pic.twitter.com/JClu9pnzqO

— R Function A Day (@rfunctionaday) April 10, 2021

# April 11

If you are fluent in {dplyr} and wish to learn more about {data.table}, it can be nifty to have a function that can provide a syntax translation between the two.The {show\_query} function from {dtplyr} does just that! https://t.co/RKhCwjgNSt#rstats#DataScience pic.twitter.com/uj9NrXyNhY

— R Function A Day (@rfunctionaday) April 11, 2021

# April 12

Highest Density Interval (HDI) is a credible interval that contains the most probable effect values. The  $\{hdi\}$  function from  $\{bayestestR\}$  helps to compute and visualize HDI easily for posterior distributions from Bayesian models https://t.co/ui1FRXgqzq#rstats #DataScience pic.twitter.com/w4TcHpaVOP

— R Function A Day (@rfunctionaday) April 12, 2021

# April 13

Google trends analytics is helpful in the study of global web search patterns. The  $\{gtrends\}$  function from  $\{gtrendsR\}$  helps extract and visualize this data for specified periods and geolocations https://t.co/yS01ELq5q4#rstats #Data-Science pic.twitter.com/mhGTSXB2rN

— R Function A Day (@rfunctionaday) April 13, 2021

### April 14

Plots in the grammar of graphics framework are a combination of layers of geometric elements. The {layer\_} function family in {ggplot2} extracts layer details, which can be helpful for testing and exploring aesthetic defaults https://t.co/mIq2G3qAo8#rstats#DataScience pic.twitter.com/jNUcLQ6nsC

— R Function A Day (@rfunctionaday) April 14, 2021

### April 15

In an age where virtual assistant programs have become ubiquitous, you may also wish to have one that helps you find solutions to common ggplot formatting problems. The  $\{gghelp\}$  function  $\{ggx\}$  mimics behavior of such an assistant https://t.co/6VQzRqbrgp#rstats #DataScience pic.twitter.com/esK1W6xMEj

— R Function A Day (@rfunctionaday) April 15, 2021

# April 16

Although a no. of s help assess validity of regression model assumptions visually, only a handful cover time series analysis. The  $\{ggtsdiag\}$  function from  $\{ggfortify\}$  provides a comprehensive diagnostic check for such models  $\{ggtsdiag\}$  https://t.co/iJaZ6bD6e1#rstats #DataScience pic.twitter.com/aeGlPV3IXn

— R Function A Day (@rfunctionaday) April 16, 2021

# April 17

Often one needs to report statistical analysis in a publication/report, and formatting them manually can be tedious and error-prone The

{report} function from the eponymous automates this process to follow best practices https://t.co/gAaRN4Qqr1#rstats #DataScience pic.twitter.com/59QS89HiLE

— R Function A Day (@rfunctionaday) April 17, 2021

### April 18

If your choice of color palette is not color-blind friendly, color differences in a plot may not be obvious to color-blind people. The {replacePlotColor} function from {colorBlindness} helps you replace colors with safe color-shttps://t.co/AN9lyD9fpc#rstats #DataScience pic.twitter.com/coudegY0fm

— R Function A Day (@rfunctionaday) April 18, 2021

### April 19

Exploratory data analysis often involves specifying and comparing multiple regression models. The  $\{ modelplot \}$  function from  $\{ modelsummary \}$  provides pretty dot-and-whisker plots to display/compare regression estimates from models: https://t.co/0vyzYY9bUy#rstats #DataScience pic.twitter.com/ZtkV0EUjVd

— R Function A Day (@rfunctionaday) April 19, 2021

# April 20

Next to statistical significance, we are often interested in the practical relevance of an effect. The {interpret\_} function family from {effectsize} provides such interpretation guidelines, which can differ across disciplines https://t.co/CaqThRABhy#rstats#DataSciencepic.twitter.com/3ywbl2imPj

— R Function A Day (@rfunctionaday) April 20, 2021

# April 21

The {purr::map\_} functions apply a function to list elements.But what if one wants to apply a function not to each element of the list but to all combinations of elements?The {xmap\_} functions from {crossmap} do exactly this!https://t.co/9ITKhUqV9P#rstats #DataScience pic.twitter.com/woQenHnhfN

— R Function A Day (@rfunctionaday) April 21, 2021

### April 22

PCA is a popular method to reduce the dimensionality of multivariate data and a biplot is a useful visualization method for the same. The  $\{\text{fviz\_pca\_biplot}\}\$  function from  $\{\text{factoextra}\}\$  makes it effortless to make elegant biplots:https://t.co/DRGesAG4vq#rstats #DataScience pic.twitter.com/RB4BoCDp1S

— R Function A Day (@rfunctionaday) April 22, 2021

# April 23

Sometimes you just want to convert the source code from R script (.R) into a new Markdown (.md) document/report. The {spin} function from {knitr} makes this conversion effortless! https://t.co/cBaYSC5nc8#rstats #Data-Science pic.twitter.com/u1kIa8Of9T

— R Function A Day (@rfunctionaday) April 23, 2021

# April 24

If one correlation is significant, while the other isn't, it's a fallacy to conclude that difference in correlations itself is statistically significant. The  $\{cocor\}$  function from eponymous helps to formally test this difference: https://t.co/9CjLNcqffG#rstats#DataScience pic.twitter.com/XiJ5OqIExv

— R Function A Day (@rfunctionaday) April 24, 2021

# April 25

Confusion matrix visualization helps assess the performance of a (binary or multi-class) classification algorithm. The {plot\_confusion\_matrix} function from {cvms} produces elegant and informative confusion matrix plots https://t.co/NHxGNS8XnD#rstats#DataScience pic.twitter.com/SZWvibYAQp

— R Function A Day (@rfunctionaday) April 25, 2021

# April 26

As trivial as combining multiple characters to form a single phrase sounds, the common solutions return outputs that are imperfect for

human readers. The {combine\_words} helper function from {knitr} fills in this gap! https://t.co/M0CgOUU0ed#rstats #DataScience pic.twitter.com/XuCNHf3BFi

— R Function A Day (@rfunctionaday) April 26, 2021

## April 27

Although a number of s provide functions to visualize a one-way ANOVA design, few support visualizing more complex, multi-way ANOVA designs. The {afex\_plot} function from {afex} is one such function! https://t.co/3px5ySCzrd#rstats#DataScience pic.twitter.com/3g9hkZ3ySy

— R Function A Day (@rfunctionaday) April 27, 2021

### April 28

Markdown has a syntax that is enviable for its ease and simplicity. So one might naturally wish to use it for annotations in  $\{ggplot2\}$  plots. The  $\{element\_markdown\}$  function from  $\{ggtext\}$  magically helps to do exactly this! https://t.co/54WpoyrVje#rstats #DataScience pic.twitter.com/irr8gRVaxf

— R Function A Day (@rfunctionaday) April 28, 2021

# April 29

If we have sensitive categorical data (e.g., gender, race, etc.), we might sometimes be required to anonymize them before carrying out any analysis. The {fct\_anon} function from {forcats} helps exactly with this step https://t.co/xsR3HipYqu#rstats #DataScience pic.twitter.com/C6apoc6fEP

— R Function A Day (@rfunctionaday) April 29, 2021

# April 30

Google's Tesseract (https://t.co/tJkaT2vH2j), a powerful optical character recognition engine, can extract text embedded in images from over 100 languages!The {ocr} function from {tesseract} provides access to this engine https://t.co/H0vHvn59sQ#rstats #DataScience pic.twitter.com/g0GMKB9JEy

— R Function A Day (@rfunctionaday) April 30, 2021

# May 2021

## May 1

In {ggplot2}, the missing values are removed by default, but sometimes we may wish to visualize them to see if there is a pattern in missingness. The {geom\_miss\_point} function from {naniar} offers exactly this functionality https://t.co/zJrYSMhnX4#rstats #DataScience pic.twitter.com/IrXFHoLVG1

— R Function A Day (@rfunctionaday) May 1, 2021

# May 2

While exploring data, one often needs a quick and easy way to create dot-and-whisker plots of coefficient estimates (or other quantities) for regression models. The {ggcoefstats} function from {ggstatsplot} offers one such option-https://t.co/e4iZpPoNIC#rstats #DataScience pic.twitter.com/suxiOKjuLo

— R Function A Day (@rfunctionaday) May 2, 2021

# May 3

Not all functions can properly deal with labelled data, which can cause problems for data analysis. So often one may wish to just remove all labels. The {remove\_all\_labels} function from {sjlabelled} does exactly this https://t.co/9mJHPTRlVD#rstats#DataScience pic.twitter.com/dt6Pbfkn58

— R Function A Day (@rfunctionaday) May 3, 2021

### May 4

The {ggplot2} syntax to carry out few common routines (e.g, changing legend position, axes, etc.) can be surprisingly hard to remember. The {easy\_} function family from {ggeasy} provides memorable shortcuts for such routines https://t.co/vqFYzcvxKZ#rstats #DataScience pic.twitter.com/eZvdrDwmNf

— R Function A Day (@rfunctionaday) May 4, 2021

### May 5

Google Scholar is an essential platform to organize one's scholarly research output. The {get\_} function family from {scholar} provides various helpers to extract information about the scholar, publications, citations, etc. https://t.co/ndoPs9Yy8S#rstats #DataScience pic.twitter.com/lAMo79rZu3

— R Function A Day (@rfunctionaday) May 5, 2021

# May 6

Linear and linear mixed-effects models assume normally distributed residuals and random effects. The validity of the assumption can be statistically and visually checked using the {check\_normality} function from {performance} ! https://t.co/7XbOrSrYxq#rstats #DataScience pic.twitter.com/AK7AX7iF6o

— R Function A Day (@rfunctionaday) May 6, 2021

# May 7

Often we wish to append visualizations of regression model estimates with a tabular summary of inferential statistics. The  $\{forest\_model\}$  function from  $\{forestmodel\}$  satisfies these requirements via an informative forest plot  $forest\_model\}$  satisfies these requirements via an informative forest plot  $forest\_model\}$  with the satisfies  $forest\_model$  with the satisfies fo

— R Function A Day (@rfunctionaday) May 7, 2021

# May 8

Post reproducibility crisis news, replications are on the rise across disciplines. This has led to a need to compare multiple studies. To this end, the function  $\{sci\_figure\}$  from  $\{scifigure\}$  proves to be a helpful visual tool https://t.co/GnwtwoUcar#rstats #DataScience pic.twitter.com/TXbndnA0Bu

— R Function A Day (@rfunctionaday) May 8, 2021

### May 9

Sometimes the data contain implicitly missing values and one may wish to make them explicit by completing missing information. The {complete} function from {tidyr} does exactly this! https://t.co/tHbK4YAJlZ#rstats #DataScience pic.twitter.com/xbDCkW0kLG

— R Function A Day (@rfunctionaday) May 9, 2021

### May 10

Although {patchwork} 's arithmetic syntax (+, \*, etc.) to combine plots together is extremely easy and intuitive, it can be difficult to use programmatically. The {wrap\_plots} function is the perfect alternative solution! https://t.co/AGLkfbPUja#rstats#DataScience pic.twitter.com/fJS5V9weJ3

— R Function A Day (@rfunctionaday) May 10, 2021

# May 11

Sometimes one may wish to include plots or visualizations in a table, e.g. to show the distribution of a variable. The {spec\_} function family from {kableExtra} make doing so effortless https://t.co/X4YY8Drm7C#rstats #DataScience pic.twitter.com/9HRDTxEpB8

— R Function A Day (@rfunctionaday) May 11, 2021

# May 12

ROPE defines part of the posterior distribution practically equivalent to a null effect and is useful for hypothesis testing. The {rope} function from

 $\label{eq:bayestestR} $$ helps calculate and visualize it for Bayesian regression models: $$ helps calculate and visualize it for Bayesian regression models: $$ helps calculate and visualize it for Bayesian regression models: $$ helps calculate and visualize it for Bayesian regression models: $$ helps calculate and visualize it for Bayesian regression models: $$ helps calculate and visualize it for Bayesian regression models: $$ helps calculate and visualize it for Bayesian regression models: $$ helps calculate and visualize it for Bayesian regression models: $$ helps calculate and visualize it for Bayesian regression models: $$ helps calculate and visualize it for Bayesian regression models: $$ helps calculate and visualize it for Bayesian regression models: $$ helps calculate and visualize it for Bayesian regression models: $$ helps calculate and visualize it for Bayesian regression models: $$ helps calculate and visualize it for Bayesian regression models: $$ helps calculate and visualize it for Bayesian regression models: $$ helps calculate and visualize it for Bayesian regression models: $$ helps calculate and visualize it for Bayesian regression models: $$ helps calculate and visualize it for Bayesian regression models: $$ helps calculate and visualize it for Bayesian regression models: $$ helps calculate and visualize it for Bayesian regression models: $$ helps calculate and visualize it for Bayesian regression models: $$ helps calculate and visualize it for Bayesian regression models: $$ helps calculate and visualize it for Bayesian regression models: $$ helps calculate and visualize it for Bayesian regression models: $$ helps calculate and visualize it for Bayesian regression models: $$ helps calculate and visualize it for Bayesian regression models: $$ helps calculate and visualize it for Bayesian regression models: $$ helps calculate and visualize it for Bayesian regression regre$ 

— R Function A Day (@rfunctionaday) May 12, 2021

### May 13

Sometimes we might need to convert numbers into English words (e.g., for assistant systems to read them out loud). The {numbers\_to\_words} function from {xfun} makes this routine effortless and customizable https://t.co/l2mYGmQGnx#rstats#DataScience pic.twitter.com/B9atDLK3nQ

— R Function A Day (@rfunctionaday) May 13, 2021

### May 14

The Gardner–Altman mean difference plot simultaneously displays the raw data and highlights the group difference estimate The {mean\_diff} function from {dabestr} creates such plots for two or multiple groups easily https://t.co/dhtg2Nh62r#rstats #DataScience pic.twitter.com/fjv2Vkpi19

— R Function A Day (@rfunctionaday) May 14, 2021

# May 15

For regression analysis with big datasets, we may at times wish to reduce memory assigned to model objects. The {axe\_} function family from {butcher} offer ways to remove different parts of the model object to make it leaner https://t.co/ayY86U0zOy#rstats #DataScience pic.twitter.com/9CIU1NSqKU

— R Function A Day (@rfunctionaday) May 15, 2021

# **May 16**

During exploratory phase, we may wish to visualize and model data quickly, thoroughly, and iteratively The {ggbetweenstats} function from {ggstat-splot} facilitates this for one-way design via plots with statistical details https://t.co/fQkmmLSOh3#rstats#DataScience pic.twitter.com/uxsJ8Odv5b

— R Function A Day (@rfunctionaday) May 16, 2021

### **May 17**

One often needs to compare two values on the same axis (e.g. pre-and post-treatment scores) and a dumbbell chart is an efficient way to visualize such comparison. The {dumbbell\_chart} function from {ggcharts} creates them easily: https://t.co/Y6YGS0h0DS#rstats #DataScience pic.twitter.com/Wpwey00gGV

— R Function A Day (@rfunctionaday) May 17, 2021

### **May 18**

Programming is a challenging task and we - as a teacher, a collaborator, a developer, etc. - might wish to add a touch of encouragement to this activity sometimes. The  $\{\text{praise}\}\$  function from the eponymous can be of help here  $\text{https://t.co/wImExbbaT7\#rstats}\$  #DataScience pic.twitter.com/1SnLZ7ctS7

— R Function A Day (@rfunctionaday) May 18, 2021

### **May 19**

After model-fitting, we often need to convert model objects into a dataframe, either for reporting or for visualizations. The  $\{\text{model\_parameters}\}\$  function from the  $\{\text{parameters}\}\$  does this for many regression model objects  $\text{https://t.co/4jOHsZDCaz\#rstats}\$  #DataScience pic.twitter.com/uI7sUSF0bz

— R Function A Day (@rfunctionaday) May 19, 2021

# May 20

In modern scientific work, the traditional credit assignment systems seem outmoded, and a contributions table is better suited. The {generate} function from {contribution} can easily generate such tables in ggplot2-framework https://t.co/FCTli0Ht1f#rstats #DataScience pic.twitter.com/IqcLPMFxOa

— R Function A Day (@rfunctionaday) May 20, 2021

# May 21

If you are fluent in {dplyr} and wish to learn how to write SQL queries, it can be nifty to have a function that can provide a syntax translation

between the two.The {show\_query} function from {dbplyr} does just that! https://t.co/GAjWk5qfVC#rstats#DataScience pic.twitter.com/qxOAPD4PAX

— R Function A Day (@rfunctionaday) May 21, 2021

#### **May 22**

While working with a directory, we sometimes need to get more information about its contents. Instead of using the terminal, one can simply use the {dir\_ls} function from {fs} to return a richly informative summary https://t.co/s0UxLxPykG#rstats #DataScience pic.twitter.com/kAzYf2jPfB

— R Function A Day (@rfunctionaday) May 22, 2021

### May 23

During analysis, model selection may involve specification and comparison of multiple models. The {compare\_performance} function from {performance} creates tabular + graphical summaries comparing performance indices for models https://t.co/6cAI5ZbNkl#rstats #DataScience pic.twitter.com/CxyfyRCCHY

— R Function A Day (@rfunctionaday) May 23, 2021

# May 24

While writing functions that print text to the user's terminal or console, we may wish to construct a pleasant command-line interface. The  $\{cli_{s}\}$  function family from  $\{cli_{s}\}$  provides a collection of tools to make it pretty https://t.co/HJeQ6MBgue#rstats#DataScience pic.twitter.com/ZJZNBP5SAa

— R Function A Day (@rfunctionaday) May 24, 2021

# May 25

While teaching or reporting methods, we may sometimes wish to report LaTeX equations for regression models, which can be frustrating and time-consuming. The {extract\_eq} function from {equatiomatic} makes this really easy! https://t.co/LyQ9bMxal0#rstats #DataScience pic.twitter.com/mlghSLFeGJ

— R Function A Day (@rfunctionaday) May 25, 2021

### **May 26**

Either due to reading or formatting errors, sometimes data entries that belong together in a cell might break off across rows. The {unbreak\_vals} function from {unheadr} makes it easy to join them using regular expressions https://t.co/gouxjvPows#rstats #DataScience pic.twitter.com/3a4ZA73xxP

— R Function A Day (@rfunctionaday) May 26, 2021

### May 27

Bar charts are a good way to visualize categorical data but making a well-labeled bar chart can be time-consuming. The {ggbarstats} function from {ggstatsplot} easily produces such a chart (with additional statistical details) https://t.co/dNl2IJAJX3#rstats#DataScience pic.twitter.com/0UySWaMxei

— R Function A Day (@rfunctionaday) May 27, 2021

### May 28

A common data wrangling routine involves checking for presence or absence of certain combinations when the data have combinatorial structure. The {expand} function from {tidyr} does exactly this! https://t.co/oj3THZs4RW#rstats #DataScience pic.twitter.com/SjHZo7bpxv

— R Function A Day (@rfunctionaday) May 28, 2021

# May 29

Although adding horizontal and vertical lines to  $\{ggplot2\}$  is easy, sometimes we need to add them both and with multiple intercepts. The  $\{geom\_vhlines\}$  function from  $\{ggpp\}$  provides a perfect geometric layer to do so quickly! https://t.co/gNfzDhRdhu#rstats #DataScience pic.twitter.com/1oA1ZMWDKI

— R Function A Day (@rfunctionaday) May 29, 2021

# May 30

Across projects, we may have a similar directory structure and, therefore, we may prefer to create directories algorithmically over manu-

ally. The {dir\_create} function from {fs} is perfect for safely doing this! https://t.co/SvS78Z0hIN#rstats#DataScience pic.twitter.com/uHEXy3n1N6

— R Function A Day (@rfunctionaday) May 30, 2021

## May 31

The {latex2exp} is useful to convert LaTeX equations to R's {plot-math}. But what if we instead want to do the opposite: convert {plot-math} expressions to LaTeX?The {expr2latex} function from {simsalapar} does exactly this! https://t.co/MvVrIEOdwe#rstats #DataScience pic.twitter.com/kSMSdp4gIC

— R Function A Day (@rfunctionaday) May 31, 2021

# June 2021

#### June 1

Outliers are influential observations that can cause problems for (interpreting) regression models, and they need to be detected for further scrutiny. The {check\_outliers} function from {performance} can do this effortlessly https://t.co/kb9ipoi017#rstats #DataScience pic.twitter.com/Qatg8YgQAx

— R Function A Day (@rfunctionaday) June 1, 2021

#### June 2

Project Gutenberg is a digital library with  $> 65 \rm K$  full-texts freely available. Sometimes you may wish to query if a book you want to read is available The {gutenberg\_works} function from {gutenbergr} provides this info! https://t.co/xxXL0wx3wQ#rstats #DataScience pic.twitter.com/jgGngCTmqk

— R Function A Day (@rfunctionaday) June 2, 2021

#### June 3

Although visualizing variable distribution via violin plot is easy in {gg-plot2}, we may wish to avoid redundant mirroring of the density plot. The {stat\_halfeye} function from {ggdist} provides exactly such a geometric layer! https://t.co/I3ohHjJG1s#rstats #DataScience pic.twitter.com/eVpC6OxEx9

— R Function A Day (@rfunctionaday) June 3, 2021

#### June 4

For correlation hypotheses, one may wish to simultaneously visualize both the joint and the marginal distributions. The {ggscatterstats} function from {ggstatsplot} does this by default (with statistical summary as a plus) https://t.co/09RGm3D8f5#rstats#DataScience pic.twitter.com/939n98ag9O

— R Function A Day (@rfunctionaday) June 4, 2021

#### June 5

At times, we may wish to create "safe" versions of functions that notify us if the function fails but also doesn't error and stop the workflow that relies on it. The  $\{\text{safely}\}$  function from  $\{\text{purrr}\}$  creates such "safe" functions https://t.co/TgO3VCFznT#rstats#DataScience pic.twitter.com/Au0O7G3Lgb

— R Function A Day (@rfunctionaday) June 5, 2021

#### June 6

Sometimes we need to convert an HTML to a PDF, PNG, etc. The {chrome\_print} function from {pagedown} can do this either for a local file (including an Rmd file that outputs HTML) or for a URL https://t.co/IqHMH3kBVz#rstats#DataScience pic.twitter.com/J5sGQVTDbt

— R Function A Day (@rfunctionaday) June 6, 2021

#### June 7

Sometimes the data is missing because the output format doesn't repeat values until they change. Such missing values can be filled in using the next or the previous entry. The  $\{\text{fill}\}$  function from  $\{\text{tidyr}\}$  does exactly this!  $\text{https://t.co/QTlw2j4luQ\#rstats \#DataScience pic.twitter.com/9YLldOUtrH}}$ 

— R Function A Day (@rfunctionaday) June 7, 2021

#### June 8

A test of practical equivalence checks if the effect sizes are equivalent to null effect (a range of values considered to be practically unimportant). The

{equivalence\_test} from {effectsize} performs and visualizes this test https://t.co/r3sWIusHcH#rstats #DataScience pic.twitter.com/rurbfkD04l

— R Function A Day (@rfunctionaday) June 8, 2021

#### June 9

Tables are typically presented outside of graphics. But sometimes we may wish to display them alongside graphics, and this requires making "graphical" tables. The {tableGrob} function from {gridExtra} can do exactly this! https://t.co/yatEDnIiHJ#rstats #DataScience pic.twitter.com/obnLMJSSEh

— R Function A Day (@rfunctionaday) June 9, 2021

#### June 10

A scatterplot matrix elegantly visualizes multi-dimensional data with variable pair graphs arranged in a matrix with shared scales. The {ggpairs} function from {GGally} provides an easy and flexible way to generate them! https://t.co/liWHH9PAUe#rstats #DataScience pic.twitter.com/z94y7K7IMk

— R Function A Day (@rfunctionaday) June 10, 2021

#### June 11

Sometimes you just want to quickly convert the source code from R script (.R) into a report (can be a markdown, PDF, HTML). The  $\{\text{stitch}\}\$  function family from  $\{\text{knitr}\}\$  makes this conversion effortless! https://t.co/F7q6zYqn84#rstats#DataScience pic.twitter.com/bPwdrVMEOw

— R Function A Day (@rfunctionaday) June 11, 2021

#### June 12

If data has grouped/clustered structure, we may wish to highlight this in a visualization. The {geom\_mark\_ellipse} function from {ggforce} provides a perfect geometric layer to achieve this by drawing an annotated ellipse! https://t.co/CBfw7Uj52e#rstats #DataScience pic.twitter.com/iIkVhL6ZXc

— R Function A Day (@rfunctionaday) June 12, 2021

#### June 13

Sometimes you'd wish to download full text for a paper to read from the comfort of R console. The  $\{ft\_get\}$  function from  $\{fulltext\}$  can do exactly this; you only need to provide a doi! https://t.co/AL9zFqN1wj#rstats #DataScience pic.twitter.com/jnAShY92I4

— R Function A Day (@rfunctionaday) June 13, 2021

### June 14

If you have a script that takes a long time to run, you may wish to get notified when it finishes. The {beep} function from {beepr} can do this by producing a sound of your choosing! https://t.co/tXSziFWu88#rstats #DataScience pic.twitter.com/okF71yE6ZV

— R Function A Day (@rfunctionaday) June 14, 2021

#### June 15

Significance-testing for regression models assumes that errors have constant variance. The validity of this key assumption can be statistically and visually checked using the {check\_heteroscedasticity} function from {performance} https://t.co/TOemt5pXes#rstats #DataScience pic.twitter.com/4y4txOtnSs

— R Function A Day (@rfunctionaday) June 15, 2021

#### June 16

Sometimes we might have a dataframe containing information that we ideally prefer in a list. The {deframe} function from {tibble} can do the needed transformation to extract a list https://t.co/dsjo0w5aYD#rstats#DataScience pic.twitter.com/uRFlJMoJ0Q

— R Function A Day (@rfunctionaday) June 16, 2021

#### June 17

While working with text data, we may wish to create page-styled visualizations (to highlight certain words, to provide a quick visual summary, etc.). The {ggpage\_plot} function from {ggpage} creates them in

— R Function A Day (@rfunctionaday) June 17, 2021

#### June 18

Sometimes we may wish to print colorful output to the R terminal. The color functions (red, green, etc.) from {crayon} make this really easy (via ANSI escape codes)! https://t.co/RGvmzBQR7B#rstats #DataScience pic.twitter.com/X7jGXxHb9h

— R Function A Day (@rfunctionaday) June 18, 2021

#### June 19

Population pyramids help visualize the overall age distribution of a population and are useful across many fields (e.g., ecology). The {pyramid\_chart} function from {ggcharts} provides an easy syntax to create them https://t.co/vvhumXF3s5#rstats#DataScience pic.twitter.com/O7RB54NLnX

— R Function A Day (@rfunctionaday) June 19, 2021

#### June 20

Sometimes you'd wish to download and install the needed softwares from the comfort of your R console itself. The {install.} function family from {installr} can do exactly this only on Windows OS https://t.co/MdlaWRGskO#rstats#DataScience pic.twitter.com/RQOgFGyJYS

— R Function A Day (@rfunctionaday) June 20, 2021

#### June 21

Pie charts are a popular way to visualize categorical data, but making a well-labeled pie chart can be time-consuming. The {ggpiestats} function from {ggstatsplot} produces them easily (with additional statistical details) https://t.co/8RAAjLUP7H#rstats #DataScience pic.twitter.com/Eqbsd7ACLN

— R Function A Day (@rfunctionaday) June 21, 2021

#### June 22

If you have experience with object-oriented programming (OOP) languages, you may wish to learn its implementation in R. The first step would be to know object types in R, and the {otype} function from {sloop} makes this easy!https://t.co/cfl3iD4n9m#rstats #DataScience pic.twitter.com/avIaOGvlHC

— R Function A Day (@rfunctionaday) June 22, 2021

#### June 23

Even if you know HTML, sometimes you may wish to generate the HTML code/tags using R itself. The tag builder function family from {html-tools} makes this straightforward! https://t.co/X0cN4XB0WCPotentially also helpful for self-teaching HTML via R. #rstats #DataScience pic.twitter.com/Tv8jES7TYt

— R Function A Day (@rfunctionaday) June 23, 2021

#### June 24

Significance-testing for ANOVAs assumes that all comparison groups have the same variance. The validity of this assumption can be statistically and visually checked using the  $\{check\_homogeneity\}$  function from  $\{performance\}$ ! https://t.co/YVlloAfSdo#rstats#DataScience pic.twitter.com/advuxCgV6t

— R Function A Day (@rfunctionaday) June 24, 2021

#### June 25

While writing in RMarkdown, we may be required to embed local or remote assets to enrich the document. The {include\_} function family from {knitr} makes this easy and also provides many advantages over Markdown syntax https://t.co/3ffCSIRvCw#rstats #DataScience pic.twitter.com/gbOUCChpXX

— R Function A Day (@rfunctionaday) June 25, 2021

#### June 26

While deciding to use a color palette, not only do we wish to know the hex color codes but also how the color looks. The {paletteer\_d} function from {paletteer} does exactly this! https://t.co/zNlTlQtytBP.S. For continuous palettes: {paletteer\_c}#rstats #DataScience pic.twitter.com/gASyRT94mg

— R Function A Day (@rfunctionaday) June 26, 2021

### June 27

For multivariate data, a radar chart helps visualize multiple quantitative variables on a two-dimensional chart. The  $\{ggRadar\}$  function from  $\{ggiraphExtra\}$  makes it really easy to create static or interactive radar charts! https://t.co/JXXAQbNOyE#rstats #DataScience pic.twitter.com/cHbCKDd8Ig

— R Function A Day (@rfunctionaday) June 27, 2021

#### June 28

Sometimes R objects need to be compared (e.g. while implementing a caching strategy), and this can be done by creating unique hash digests for them. The {digest} function from the eponymous does exactly this!  $3.2 \, https://t.co/dFy9o3RpbC\#rstats\#DataScience~pic.twitter.com/GJNB48TXGc$ 

— R Function A Day (@rfunctionaday) June 28, 2021

#### June 29

If data has grouped/clustered structure, we may wish to highlight this in a visualization. The {geom\_mark\_hull} function from {ggforce} provides a geometric layer to achieve this by annotating sets of points via hulls https://t.co/fnjCPTf2Ki#rstats #DataScience pic.twitter.com/wbvFiHaEyt

— R Function A Day (@rfunctionaday) June 29, 2021

#### June 30

Clustering algorithms can often disagree on the number of clusters present in the data. To address this, the  $\{n\_clusters\}$  function from  $\{parameters\}$  runs

28 different algorithms and suggests a number based on maximum consensus https://t.co/DIxPXIhhLg#rstats#DataScience pic.twitter.com/gMIT5jd1QO

— R Function A Day (@rfunctionaday) June 30, 2021

# July 2021

## July 1

If you share code plus data, it's a good idea to adopt a few defensive techniques to ensure that the data are what the code expects. The {assert\_that} function from {assertthat} provides just the tool! https://t.co/kQT74S0AQX#rstats #DataScience pic.twitter.com/ScTmUxQxnr

— R Function A Day (@rfunctionaday) July 1, 2021

# July 2

Either for aesthetic or for highlighting purposes, you may sometimes wish to draw borders around legend keys in {ggplot2} plots. The {keybox} from {gg-fun} does exactly this, easily and flexibly https://t.co/dBAjEqKzY2#rstats#DataScience pic.twitter.com/mvFxIeInyj

— R Function A Day (@rfunctionaday) July 2, 2021

# July 3

If you don't use RMarkdown and copy-paste software output to report statistics, you'd want to check that no errors were made in the process. The  $\{\text{statcheck}\}\$  function from eponymous does this (for single or multiple files)! https://t.co/HdW6CKKPO8#rstats #DataScience pic.twitter.com/tgC5ysvz6T

— R Function A Day (@rfunctionaday) July 3, 2021

### July 4

Correctly specifying a distribution family for regression model can improve estimate accuracy. But what if we're unsure? The {check\_distribution} function from {performance} uses Random Forest to help you reconsider the choice https://t.co/qD7cQvNLLz#rstats #DataScience pic.twitter.com/MLhkCT2cwh

— R Function A Day (@rfunctionaday) July 4, 2021

### July 5

While scraping web data in R, sometimes we may wish that the extracted text layout mimics its browser/HTML behavior (e.g. ignore whitespace). The {html\_text2} function from {rvest} helps with exactly this! https://t.co/QJwe3nXx43#rstats#DataScience pic.twitter.com/T7NU9MYKqL

— R Function A Day (@rfunctionaday) July 5, 2021

### July 6

Simple slopes analyses can help understand interaction effects in linear regression. The  $\{\rm sim\_slopes\}$  function from  $\{\rm interactions\}$  provides an easy way to both run and visualize this analysis for 2-way or 3-way interactions! https://t.co/4Xvc4FMrEr#rstats #DataScience pic.twitter.com/70AFS2QQcF

— R Function A Day (@rfunctionaday) July 6, 2021

# July 7

A histogram is a good visualization to represent the distribution of numeric data. The {gghistostats} function from {ggstatsplot} provides ready-made histograms (with additional descriptive and inferential statistics) https://t.co/zSmT4MBGjX#rstats#DataScience pic.twitter.com/xMFwXedQSO

— R Function A Day (@rfunctionaday) July 7, 2021

# July 8

If you want to use non-standard fonts or characters, getting graphics devices to work with them can be a pain. The {showtext\_auto} function from

{showtext} supports a large collection of font formats and graphics devices! https://t.co/bt3SzZfyhI#rstats #DataScience pic.twitter.com/bYmyfZEfhL

— R Function A Day (@rfunctionaday) July 8, 2021

### July 9

Sometimes we may wish to provide descriptive labels for colors we are using, but may not know how to label them. The  $\{name\}$  function from  $\{ColorNameR\}$  produces color labels in multiple languages and colorspaces! https://t.co/RVkqjq7Ksz#rstats#DataScience pic.twitter.com/MmD1MWPHF3

— R Function A Day (@rfunctionaday) July 9, 2021

### July 10

Sometimes we may wish to check all relevant assumptions for a regression model in one go. The {check\_model} function from {performance} does exactly this and also provides elegant visualizations with helpful pointers  $https://t.co/4SIIL0u9Jn\#rstats\#DataScience\ pic.twitter.com/EMmye4qAZk$ 

— R Function A Day (@rfunctionaday) July 10, 2021

# July 11

If you are writing manuscripts in RMarkdown, you may wish to auto-generate citations for all R packages used in the document. The {write\_bib} function from {knitr} does exactly this! https://t.co/JYux01tB7h#rstats #Data-Science pic.twitter.com/YvOiaPeYfY

— R Function A Day (@rfunctionaday) July 11, 2021

# July 12

While plotting time series data, we may wish to plot several subseries corresponding to the periods of interest (seasons, months, etc.). The {ggfreqplot} function from {ggfortify} makes this task effortless! https://t.co/rRmcQbKv4U#rstats#DataScience pic.twitter.com/Vic17LXkM9

— R Function A Day (@rfunctionaday) July 12, 2021

### July 13

If s being used happen to have a function with an identical name, using that function may fail. Aside from :: qualifier, {conflicted\_prefer} function from {conflicted} can solve this conflict by prioritizing one function https://t.co/n96Mt8kHx3#rstats#DataScience pic.twitter.com/V9jZwxADoM

— R Function A Day (@rfunctionaday) July 13, 2021

### July 14

Exploratory data analysis often involves specifying and comparing multiple regression models. The {compare\_parameters} function from {parameters} provides dot-and-whisker plots to display and compare regression estimates! https://t.co/vmuGta5W9i#rstats #DataScience pic.twitter.com/Xyve8SMk1Q

— R Function A Day (@rfunctionaday) July 14, 2021

# July 15

Either computing environment or good practice recommendations may compel you to check for file paths, character encoding, etc. in your script. The {is\_} function family from {xfun} provides tools to run such checks easily https://t.co/LdRTIKXOCA#rstats #DataSciencee pic.twitter.com/YCtgZEufae

— R Function A Day (@rfunctionaday) July 15, 2021

# July 16

Sometimes we may wish to assess the polarity (positive, negative, neutral) of text data. The {sentiment} function from {sentimentr} provides a convenient and flexible way to approximate the sentiment of the text by sentence https://t.co/mMpxUxXyVP#rstats #DataScience pic.twitter.com/9oXGUwVTnf

— R Function A Day (@rfunctionaday) July 16, 2021

### July 17

During exploratory phase, we may wish to visualize and model data quickly and thoroughly. The {ggwithinstats} function from {ggstatsplot} does this for one-way repeated measures designs via plots with statistical details https://t.co/lOT7qa37z8#rstats #DataScience pic.twitter.com/UxoUQr1cvB

— R Function A Day (@rfunctionaday) July 17, 2021

#### July 18

To keep related data together, you might sometimes create dataframes with columns that themselves contain dataframes. Since working with them can be a pain, the {unpack} function from {tidyr} helps you "unpack" them! https://t.co/rt0ekSiMUg#rstats#DataScience pic.twitter.com/m2O8OQRDgF

— R Function A Day (@rfunctionaday) July 18, 2021

#### July 19

If you use {dplyr} for data analysis, you may sometimes wish to carry out statistical analysis on a grouped data frame. If the statistical function requires the whole dataframe, the {cur\_data} function provides just the tool! https://t.co/IemOGQqqrH#rstats #DataScience pic.twitter.com/MzEnBq0tp0

— R Function A Day (@rfunctionaday) July 19, 2021

# July 20

Visualizing variable distribution via violin plot is easy in {ggplot2}, but we may wish to avoid redundant mirroring of the density plot. The {stat\_density\_ridges} function from {ggridges} provides just the geometric layer! https://t.co/x6yAh0hHW9#rstats#DataScience pic.twitter.com/V3JhOamnFb

— R Function A Day (@rfunctionaday) July 20, 2021

# July 21

During analysis, model selection may involve the specification of multiple models and formally testing if they are different. The {test\_performance}

function from {performance} performs and summarizes indices from these tests  $https://t.co/Qd25p55XPq\#rstats\ \#DataScience\ pic.twitter.com/EvmEOVXNRn$ 

— R Function A Day (@rfunctionaday) July 21, 2021

### July 22

While visualizing data across a combination of variables,  $\{facet\_wrap\}$  in  $\{ggplot2\}$  creates small multiples. But what if the variables are nested? The  $\{facet\_nested\_wrap\}$  function from  $\{ggh4x\}$  handles exactly such designs! https://t.co/WVp154GvPA#rstats #DataScience pic.twitter.com/P6ZjOUF9eV

— R Function A Day (@rfunctionaday) July 22, 2021

### July 23

Sometimes you may wish to do something in R and can't think of any package that might be helpful. In such cases, the  $\{\text{findPackage}\}\$  function from  $\{\text{packagefinder}\}\$  can search and return relevant CRAN packages given the keywords  $\text{https://t.co/OIiwJtafTq\#rstats}\$  #DataScience pic.twitter.com/n946xE4cAS

— R Function A Day (@rfunctionaday) July 23, 2021

# July 24

Sometimes you may wish to write SQL queries (for practice?) without access to a database. In such cases, you can use the {dbwritetable} function from {DBI} to copy a dataframe to a database table, and then write queries! https://t.co/Gu3HwjrR0S#rstats#DataScience pic.twitter.com/z6IZnW0o1o

— R Function A Day (@rfunctionaday) July 24, 2021

# July 25

Simulating parameter draws can sometimes be a (computationally faster) alternative to bootstrapping. The {simulate\_parameters} function from {parameters} can run and visualize such simulations for various regression models https://t.co/SHdA3JANeq#rstats #DataScience pic.twitter.com/sRe2BhPKjW

— R Function A Day (@rfunctionaday) July 25, 2021

### July 26

In case you are looking for an alternate, "operator" way to access object attributes in R, you can use the infix attribute accessor (%@%) from {rlang} !https://t.co/C0T97lOtWV#rstats#DataScience pic.twitter.com/zAYw4JCo5i

— R Function A Day (@rfunctionaday) July 26, 2021

### July 27

Sometimes you need to plot data from different geographical entities into a grid and may wish to preserve the original geographical orientation of the entities. The  $\{facet\_geo\}$  function from  $\{geofacet\}$  produces such a grid! https://t.co/IUIQ1B7rUw#rstats #DataScience pic.twitter.com/MamwLytO4F

— R Function A Day (@rfunctionaday) July 27, 2021

### July 28

Operating on multiple columns in a row-wise manner is fairly straightforward in  $\{dplyr\}$  .In this workflow, the  $\{c\_across\}$  function allows you to use the tidy selection syntax to select columns to operate on https://t.co/gmFEid0WDK#rstats#DataScience pic.twitter.com/8uMiwmcxtq

— R Function A Day (@rfunctionaday) July 28, 2021

# July 29

Either out of curiosity or to improve its performance, sometimes you may want to time your R code. The  $\{\text{tic}\}/\{\text{toc}\}\$  function from  $\{\text{tictoc}\}$  provides just the tool https://t.co/yCu9ArIdBd#rstats #DataScience pic.twitter.com/PyHJCSm2NG

— R Function A Day (@rfunctionaday) July 29, 2021

# July 30

To ensure reproducibility of R script, you may wish it to download needed package versions on a certain date. The {groundhog.library} function from

 $\{groundhog\} \quad creates \ a \ local \ library \ with \ the \ needed \ package \ versions \ https://t.co/bOhOXRzfMZ\#rstats\ \#DataScience\ pic.twitter.com/1pLfn8uU4q$ 

— R Function A Day (@rfunctionaday) July 30, 2021

### July 31

ROC curves provide a convenient way to compare responses and predictions of a binomial model. The {performance\_roc} function from {performance} computes AUC metric and visualizes ROC curves for a collection of models  $\frac{\text{https:}}{\text{https:}} \frac{\text{https:}}{\text{https:}} \frac{$ 

— R Function A Day (@rfunctionaday) July 31, 2021

# August 2021

### August 1

Sometimes you may wish to insert a textual table in a {ggplot2} plot the same way you insert text labels at a specified position. The {geom\_table} function from {ggpp} offers just the geometric layer! https://t.co/bQdaxiMffR#rstats#DataScience pic.twitter.com/6raba4JIDV

— R Function A Day (@rfunctionaday) August 1, 2021

### August 2

If you are used to {dplyr}'s pipeable syntax (using %>%) and wish to continue using it when you switch to {data.table}, the {dt} helper function from {tidytable} can help! https://t.co/YzFfw2meLF#rstats #DataScience pic.twitter.com/3SQqnjj3Bz

— R Function A Day (@rfunctionaday) August 2, 2021

# August 3

If you are used to reading code with syntax highlighting, you may wish the same when code is printed in the terminal/console. The {prettycode} function from the eponymous does exactly this! https://t.co/dF1WYPJSSc#rstats#DataScience pic.twitter.com/4fK9FjnTOu

— R Function A Day (@rfunctionaday) August 3, 2021

# August 4

Compared to CSS, Sass is a more flexible HTML styling framework. As it becomes ubiquitous, you may wish to learn how Sass code you

are reading translates to familiar CSS. The {sass} function from the eponymous does this https://t.co/FR8UlmQyTY#r stats #DataScience pic.twitter.com/3ZgYl0E6j3

— R Function A Day (@rfunctionaday) August 4, 2021

### August 5

A dot plot is a good visualization to represent the distribution of labeled numeric data. The {ggdotplotstats} function from {ggstatsplot} easily produces these charts (with additional descriptive and inferential statistics) https://t.co/OLcqX643Vx#rstats#DataSciencepic.twitter.com/GZ3huWi9qU

— R Function A Day (@rfunctionaday) August 5, 2021

# August 6

If you know C and wish to understand the implementation of R data structures at C-level as S-expressions or SEXPs (https://t.co/pCGK6tlgNB), the {sxp} function from {lobstr} can be helpful! https://t.co/pb7um2e1RR#rstats #DataScience pic.twitter.com/NYrdqEJqJW

— R Function A Day (@rfunctionaday) August 6, 2021

# August 7

For teaching or for quality assessment, we may sometimes wish to visualize residuals of a model to check the goodness of fit. The  $\{\text{stat\_fit\_deviations}\}\$  function from  $\{\text{ggpmisc}\}\$  makes this easy in  $\{\text{ggplot2}\}\$  https://t.co/YezhmuyXgP#rstats #DataScience pic.twitter.com/M6o4MAcnIH

— R Function A Day (@rfunctionaday) August 7, 2021

# August 8

If we need to write an "impure" function that modifies R landscape (e.g. changes working directory), we'd do it so that behavior of other R functions doesn't change. The {local\_} function family in {withr} can help to do so! https://t.co/CgklVPJp7n#rstats #DataScience pic.twitter.com/rrpbojxoev

— R Function A Day (@rfunctionaday) August 8, 2021

#### August 9

Gelman and Hill (2007) propose a binned residual plot to check the under-or over-fitting of binomial logistic regression models. 0 1 The {binned\_residuals} function from {performance} easily produces such visualization https://t.co/gAAjFNIf92#rstats#DataScience pic.twitter.com/cKw8CxpJfC

— R Function A Day (@rfunctionaday) August 9, 2021

### August 10

Even after doing everything you can in R, sometimes you may want to further improve the performance of your code by rewriting it in C++. The {cpp\_function} from {cpp11} provides a convenient way to do so https://t.co/5fdrx9KPc6#rstats #DataScience pic.twitter.com/IbKeeuZdjb

— R Function A Day (@rfunctionaday) August 10, 2021

### August 11

For common statistical tests, we may wish to extract not only the details of inferential statistics but also effect size estimates. Functions, like {two\_sample\_test}, from {statsExpressions} provide a tidy way to do so https://t.co/MJ1avaR6WJ#rstats#DataScience pic.twitter.com/zKFUetTeXR

— R Function A Day (@rfunctionaday) August 11, 2021

# August 12

Sometimes data analysis may require finding the first non-missing value (to replace it with another value, to create a new variable, etc.) across vectors or columns. The {coalesce} function from {dplyr} comes in handy here https://t.co/Q7EPEAmFZC#rstats#DataScience pic.twitter.com/Upqhjd5eJY

— R Function A Day (@rfunctionaday) August 12, 2021

# August 13

Unified Modeling Language provides a way to visualize the design of a system, and nomnoml (https://t.co/X9yAhs166L) is online tool to draw UML diagrams. The {nomnoml} function from eponymous renders UML

diagrams from R itself! https://t.co/CBZgudgltr#rstats #DataScience pic.twitter.com/KmksKDgQPz

— R Function A Day (@rfunctionaday) August 13, 2021

### August 14

Sometimes you might need to analyze the scanned text data present in a PDF.The {pdf\_ocr\_text} function from {pdftools} can extract such text https://t.co/cnoqBhZ0Ys#rstats#DataScience pic.twitter.com/1LMVHfGgsL

— R Function A Day (@rfunctionaday) August 14, 2021

### August 15

Although {rmarkdown} makes writing reports easy, it lacks automatic numbering of and cross-referencing (for figures, tables, sections, etc) features. The 2nd variant of function family in {bookdown} provides these features https://t.co/EKFeVqQJb1#rstats#DataScience pic.twitter.com/RcIAtscT0K

— R Function A Day (@rfunctionaday) August 15, 2021

# August 16

The  $\{tmap\}$  provides API to create (static and interactive) thematic maps with a syntax resembling that of  $\{ggplot2\}$ . The  $\{qtm\}$  function provides a convenient short-hand to draw such maps quickly! https://t.co/WDYN5ofasw#rstats #DataScience pic.twitter.com/PZk4thnd4q

— R Function A Day (@rfunctionaday) August 16, 2021

# August 17

Sometimes we need to convert a deeply nested list into a rectangular dataframe. But in doing so, we may not wish to bring to the top all list elements. The {hoist} function from {tidyr} can help with such transformations https://t.co/yrhHtF2YVl#rstats #DataScience pic.twitter.com/m5TvEse0bm

— R Function A Day (@rfunctionaday) August 17, 2021

## August 18

Sometimes we want to draw text in a {ggplot2} plot so that it fits inside a defined area without manually fiddling around with font size. The {geom\_fit\_text} function from {ggfittext} resizes text to fit inside a defined box https://t.co/GiaXx9QEgb#rstats#DataScience pic.twitter.com/krnvdRqIWz

— R Function A Day (@rfunctionaday) August 18, 2021

## August 19

Posterior predictive check for a regression model uses simulated data under the fitted model to check for any discrepancies from observed data. The {pp\_check} function from {performance} carries out and visualizes this check https://t.co/qk7dnlHyP5#rstats #DataScience pic.twitter.com/R95Evuhhdp

— R Function A Day (@rfunctionaday) August 19, 2021

## August 20

If you use {dplyr} , you may wish to avoid the {group\_by} + {ungroup} workflow for grouped analysis if you just need to carry out a single operation. The {with\_groups} function provides an alternative for such contexts https://t.co/FiEeP2loxm#rstats #DataScience pic.twitter.com/XANjLS22ki

— R Function A Day (@rfunctionaday) August 20, 2021

# August 21

Sometimes you may wish to display results from a statistical test in a graphics you have prepared. The  $\{\text{statsExpressions}\}\$  functions, like  $\{\text{corr\_test}\}\$ , provide the necessary expressions https://t.co/ERUsOJKliZ#rstats#DataScience pic.twitter.com/4T3awwOSFQ

— R Function A Day (@rfunctionaday) August 21, 2021

# August 22

For some reason, you may need to prepare a calendar in R and you might prefer to do so in the {ggplot2} framework. The {calendR} function

— R Function A Day (@rfunctionaday) August 22, 2021

## August 23

The  $\{mlr3\}$  project is a modern and powerful object-oriented framework for doing machine learning (ML) in R.The  $\{autoplot\}$  function from  $\{mlr3viz\}$  provides a model-agnostic general-purpose tool for visualizing ML algorithms! https://t.co/ky8yhLtYyG#rstats #DataScience pic.twitter.com/YBu2rLz44K

— R Function A Day (@rfunctionaday) August 23, 2021

## August 24

Instead of using third-party softwares, you may sometimes wish to edit (join, convert, etc.) images from within R itself. The {image\_} function family from {magick} provide such helpers  $https://t.co/ald6jelSWG\#rstats\#DataScience pic.twitter.com/y4H67cTPnY}$ 

— R Function A Day (@rfunctionaday) August 24, 2021

# August 25

For correlation hypotheses, in addition to the joint distribution in a scatterplot, one may also wish to visualize the marginal distributions for each variable. This is easy to do using the {\_side} function family from {ggside} !https://t.co/vQYV4ELEaG#rstats #DataScience pic.twitter.com/VSBpVqtO6K

— R Function A Day (@rfunctionaday) August 25, 2021

# August 26

The UpSet plot is an efficient alternative to the Venn Diagram for visualizing a complex intersections of multiple sets. The  $\{scale\_x\_upset\}$  function from  $\{ggupset\}$  provides a  $\{ggplot2\}$  scale to create UpSet plots easily https://t.co/5rwIgAhzxa#rstats #DataScience pic.twitter.com/wk352FtXb0

— R Function A Day (@rfunctionaday) August 26, 2021

## August 27

Sometimes (e.g. for meta-analysis) we may need to either extract effect size from a test statistic or convert the available effect size to a more suitable one. The  $\{to\}$  function family from {effect size} can do such conversions https://t.co/EO6hb9NkER#r stats #DataScience pic.twitter.com/2ItAfBPwps

— R Function A Day (@rfunctionaday) August 27, 2021

## August 28

A correlation matrix is a nifty visualization for displaying relationships between multiple variables. The  $\{ggcorrmat\}$  function from  $\{ggstatsplot\}$  creates such matrices with significance testing and other descriptive details https://t.co/rbwEs6qVON#rstats#DataScience pic.twitter.com/EDPanyNE0x

— R Function A Day (@rfunctionaday) August 28, 2021

## August 29

For a given generic or class, sometimes we may be interested to systematically list and investigate the available S3/S4 methods. The  $\{methods\}$  function family in  $\{sloop\}$  provides the needed helpers https://t.co/EV7AVaSHPF#rstats#DataScience pic.twitter.com/XxFb3Es3pB

— R Function A Day (@rfunctionaday) August 29, 2021

# August 30

When we are interested in studying group differences, sometimes we may wish to annotate our visualizations with results from significance testing. The {geom\_signif} from {ggsignif} provides just the geometric layer! https://t.co/O9XM5nHdgf#rstats #DataScience pic.twitter.com/iZhilHeGO3

— R Function A Day (@rfunctionaday) August 30, 2021

# August 31

YAML language is ubiquitous, esp. in configuration files, and sometime we may need to convert R object to a YAML object. The {as\_yml} function

— R Function A Day (@rfunctionaday) August 31, 2021

# September 2021

## September 1

Sometimes we may wish to estimate density for priors and posteriors of a regression model. The {estimate\_density} function from {bayestestR} computes and visualizes these estimates https://t.co/gm8Wf9qr3f#rstats #DataScience pic.twitter.com/SjuoAiuXPo

— R Function A Day (@rfunctionaday) September 1, 2021

# September 2

If you use  $\{dplyr\}$  and  $\{tidyr\}$  s to wrangle data, you may wish to see some feedback about what different operations did, especially in long piped chains. The  $\{tidylog\}$  functions do exactly this https://t.co/MfpoUZoBRQ#rstats #DataScience pic.twitter.com/hOnonyFHzx

— R Function A Day (@rfunctionaday) September 2, 2021

# September 3

A cheatsheet is a helpful resource to have at hand while learning a new R package. The  $\{get\_all\_cheatsheets\}$  function from  $\{cheatsheet\}$  makes it convenient to download all available cheatsheets on your computer in one go! https://t.co/CxW1EOoaLK#rstats #DataScience pic.twitter.com/CXkPpPWZ5d

— R Function A Day (@rfunctionaday) September 3, 2021

## September 4

Sometimes you may wish to display a collection of images in a  $\{ggplot2\}$  graph. The  $\{geom\_point\_img\}$  function from  $\{ggimg\}$  provides just the needed geometric layer! https://t.co/YinETxrQdk#rstats #DataScience pic.twitter.com/rhB2jwgsZe

— R Function A Day (@rfunctionaday) September 4, 2021

## September 5

Sometimes you may wish to execute a computation in a clean new R process without affecting other R processes. The  $\{r\}$  function from  $\{callr\}$  does exactly this! https://t.co/CXYdyo3d1P#rstats #DataScience pic.twitter.com/2cBDDRC2nj

— R Function A Day (@rfunctionaday) September 5, 2021

## September 6

Cox regression model is widely used in medical research to assess the effect of several risk factors on survival time of patients. The {ggcoxdiagnostics} function from {survminer} can help visually assess goodness of model fit https://t.co/BzVW6ReYFm#rstats #DataScience pic.twitter.com/3z6D7FQgL9

— R Function A Day (@rfunctionaday) September 6, 2021

# September 7

Sometimes we may need to do high-quality conversion of pdf page(s) to image (png, jpeg, etc.) format. The  $\{pdf\_convert\}$  function from  $\{pdftools\}$  provides the needed functionality  $https://t.co/DgielR9zoQ\#rstats\ \#DataScience\ pic.twitter.com/bHKPNcnPLQ$ 

— R Function A Day (@rfunctionaday) September 7, 2021

# September 8

Sometimes you may want to plot different probability distributions with parameters of interest. The {ggdistribution} function from {ggfortify} provides

a convenient helper to do so! https://t.co/8ue1b7Drh2#rstats #DataScience pic.twitter.com/aOHHeMT5KT

— R Function A Day (@rfunctionaday) September 8, 2021

## September 9

Sometimes we need to perform both addition and subtraction of a quantity (e.g. while computing confidence intervals of an estimate). The plus-minus operator (%+-%) from {dipsaus} can do this conveniently for various data types https://t.co/IIa5zzsM9L#rstats #DataScience pic.twitter.com/JimL38L0Sl

— R Function A Day (@rfunctionaday) September 9, 2021

## September 10

While visualizing group differences, sometimes you may also wish to include some additional descriptive statistics in the plot itself. The {ggsummarystats} function from {ggpubr} provides a flexible way to do so! https://t.co/DMzyXViicx#rstats#DataScience pic.twitter.com/lIrBWo1Gmz

— R Function A Day (@rfunctionaday) September 10, 2021

# September 11

 $\{purrr\} \text{ 's } \{map\} \text{ and } \{map2\} \text{ function families can apply a single- or two-argument functions to a list. But what if you want to apply a function with multiple arguments? The <math display="block"> \{pmap\_\} \text{ function family addresses exactly this problem } \text{https://t.co/FrCzOUFLtJ\#rstats } \#DataScience pic.twitter.com/oSQRgS4ywS}$ 

— R Function A Day (@rfunctionaday) September 11, 2021

# September 12

Euler diagram, a way to visualize set relationships, is a generalization of Venn diagram since it relaxes the requirement that all set interactions be present. The {euler} function from {eulerr} easily produces these diagrams https://t.co/7eM2ZqEeVG#rstats #DataScience pic.twitter.com/aEBXBdIdt2

— R Function A Day (@rfunctionaday) September 12, 2021

## September 13

While exploring data, one often needs a quick and easy way to create dot-and-whisker plots of coefficient estimates for regression models. The  $\{ggcoef\_model\}$  function from  $\{GGally\}$  produces such plots with elegant defaults https://t.co/atW3RTPWEH#rstats #DataScience pic.twitter.com/j0Zj2fp50Q

— R Function A Day (@rfunctionaday) September 13, 2021

## September 14

Sometimes you may wish to take a snapshot of a webpage, an rmark-down document, or a Shiny application from R itself. The {\*shot} function family from {webshot} provides a convenient way to do so! https://t.co/SR0NPM36Xl#rstats#DataScience pic.twitter.com/2IvYDAB3yo

— R Function A Day (@rfunctionaday) September 14, 2021

## September 15

If you use both R and python, sometimes you may wish to convert your Jupyter notebooks so that you can modify them further with {rmarkdown}. The {convert\_ipynb} function from {rmarkdown} can do this conversion https://t.co/6pnduEMAZg#rstats #DataScience pic.twitter.com/IxtlF0faKc

— R Function A Day (@rfunctionaday) September 15, 2021

# September 16

Dropbox is a popular file hosting service and we may sometimes wish to interact with this application from the comfort of R itself. The  $\{drop_*\}$  function family from  $\{rdrop2\}$  provides just the toolbox! https://t.co/THtnR1fqB2#rstats #DataScience pic.twitter.com/AfrKlSlKCB

— R Function A Day (@rfunctionaday) September 16, 2021

# September 17

Sometimes we may need to standardize (z-score) data, i.e. express it in terms of standard deviation. The {standardize} function from {datawizard} easily

computes them, and provides further customizations (e.g. robust variant)! https://t.co/yavQlVXuey#rstats #DataScience pic.twitter.com/mNeyfbohSg

— R Function A Day (@rfunctionaday) September 17, 2021

## September 18

Slope graphs are a handy tool for visualizing trends in paired data with multiple observations. The {newggslopegraph} function from {CGPfunctions} provides a helper to quickly prepare such a graph! https://t.co/Rw9BmRpPPc#rstats#DataScience pic.twitter.com/XCO6SOocTa

— R Function A Day (@rfunctionaday) September 18, 2021

## September 19

Compiling LaTeX to PDF can be troublesome; often due to missing LaTeX packages. We may wish that such packages are automatically installed, making compilation painless. The {pdflatex} function from {tinytex} does exactly this! https://t.co/4Ga94fTm47#rstats #DataScience pic.twitter.com/JX6o9YAi1d

— R Function A Day (@rfunctionaday) September 19, 2021

# September 20

Like in SQL, we may sometimes wish to change rows in one dataset based on rows in another dataset. The {rows\_} function family in {dplyr} provides this functionality! https://t.co/uSpmlee90H#rstats #DataScience pic.twitter.com/mLTwGqKMvD

— R Function A Day (@rfunctionaday) September 20, 2021

# September 21

While visualizing distributions, boxplots can hide bimodality & violins can show non-existent data. Sina plots, where points are jittered proportional to density, provide a good solution & {ggforce::geom\_sina} supplies the layer! https://t.co/BR5iiCcf6s#rstats #DataScience pic.twitter.com/IrYGYqXUtt

— R Function A Day (@rfunctionaday) September 21, 2021

# September 22

The coefficient of determination (R $^2$ ) provides an absolute goodness-of-fit index for a regression model and is used to assess performance. The  $\{r2\}$  function from  $\{performance\}$  computes it for a variety of regression models! https://t.co/y3qQQOXuRv#rstats#DataScience pic.twitter.com/pJCrx4MOP4

— R Function A Day (@rfunctionaday) September 22, 2021

## September 23

A common issue with watching movies with subtitle files is that they can be out of sync with each other. The {srt\_shift} function from {srt} can help shift the dialogues to sync with video and write a new subtitle file! https://t.co/j5V6SnCfZ7#rstats #DataScience pic.twitter.com/JE234uj5e7

— R Function A Day (@rfunctionaday) September 23, 2021

## September 24

Hash tables can efficiently look up values irrespective of the size of the table. The {hash} function from the eponymous provides a hash-like data structure and the necessary methods for hash operations in native R style! https://t.co/QrxzzANqFV#rstats #DataScience pic.twitter.com/b75HRHxS1m

— R Function A Day (@rfunctionaday) September 24, 2021

# September 25

The sunset funnel plot includes study-level power info and acts as a diagnostic tool in meta-analysis to examine the power studies had to detect an effect of interest. The {metaviz::viz\_sunset} function can easily create them! https://t.co/cqlXpmUh0f#rstats #DataScience pic.twitter.com/lf1Pefk5XH

— R Function A Day (@rfunctionaday) September 25, 2021

# September 26

Although visualizing variable distribution via boxplot is easy, we may wish to avoid redundant vertical mirroring of the distribution. The {geom\_half\_boxplot}

function from {gghalves} provides exactly such a geometric layer! https://t.co/0kfnVPtUWU#rstats#DataScience pic.twitter.com/2KqVyhOPIA

— R Function A Day (@rfunctionaday) September 26, 2021

## September 27

Item analysis, a psychometric technique, selects few items (from a large pool) to index a psychological construct. The {tab\_itemscale} function from {sjPlot} carries out and produces elegant HTML tables for item analysis https://t.co/8Z5DzerVaU#rstats #DataScience pic.twitter.com/uIXZrVsr0Z

— R Function A Day (@rfunctionaday) September 27, 2021

## September 28

XML language is ubiquitous in storing and transporting a wide array of data structures and sometimes we may wish to work with it in R.The {as\_list} function from {xml2} converts XML document nodes to a familiar R list! https://t.co/OqvPGvv1Ce#rstats #DataScience pic.twitter.com/fddfsNc0z5

— R Function A Day (@rfunctionaday) September 28, 2021

# September 29

Even if you know markdown syntax well, sometimes you may wish to generate it algorithmically. The  $\{md_{-}\}$  function family from  $\{gluedown\}$  can be of help here https://t.co/VXXO0Ce3Mu#rstats #DataScience pic.twitter.com/EklzKUpHkB

— R Function A Day (@rfunctionaday) September 29, 2021

# September 30

Out of curiosity or while working in a memory-constrained setting, sometimes you may wish to know roughly how much memory is being used by R.The {mem\_used} function from {lobstr} provides such an estimate https://t.co/SwebVXHUrx#rstats#DataScience pic.twitter.com/SbEWyUZdPl

— R Function A Day (@rfunctionaday) September 30, 2021

# October 2021

## October 1

Correspondence analysis extends PCA to summarizes and visualizes multivariate categorical data in two-dimension plots. The {fviz\_ca} function from {factoextra} provides elegant ggplot2-based visualizations for this analysis! https://t.co/mtFtXrE0VJ#rstats#DataScience pic.twitter.com/FT2vNH70Vx

— R Function A Day (@rfunctionaday) October 1, 2021

## October 2

Text comes in a variety of encodings, and many functions for reading in text assume UTF-8 encoding. But what if this assumption doesn't hold up?In such cases, the  $\{utf8\_valid\}$  function from  $\{utf8\}$  can find the offending text https://t.co/vwL09X0zrq#rstats #DataScience pic.twitter.com/cU8tkACV75

— R Function A Day (@rfunctionaday) October 2, 2021

## October 3

While exploring data, one often needs a quick and easy way to display distributions of coefficient estimates for regression models. The {dwplot} function from {dotwhisker} produces such plots easily and flexibly! https://t.co/aHrGaAG8Kv#rstats#DataScience pic.twitter.com/IwGGnBQN82

— R Function A Day (@rfunctionaday) October 3, 2021

## October 4

In the hypothesis testing framework, sometimes we may wish to generate a distribution corresponding to our null hypothesis. The {generate} function

from {infer}—easily resamples observed data to create such a distribution! https://t.co/39GlrUrqsp#rstats #DataScience pic.twitter.com/rt60yA7YFQ

— R Function A Day (@rfunctionaday) October 4, 2021

## October 5

Having stand-out comment lines decorated with bands of characters can make different sections of R scripts easy to identify and navigate. The  $\{xxx_*\}$  function family from  $\{ARTofR\}$  offers a collection of such comments https://t.co/in3KGiwDXs#rstats #DataScience pic.twitter.com/c75VrfhniD

— R Function A Day (@rfunctionaday) October 5, 2021

## October 6

Association rule mining is an unsupervised method to find attributes that frequently occur together in a dataset. The {plot} method from {arulesViz} can visualize found association rules in the ggplot2-framework https://t.co/s4pUQAvqXA#rstats#DataScience pic.twitter.com/dDy9Fstgq1

— R Function A Day (@rfunctionaday) October 6, 2021

## October 7

A calendar-based graphic visualizes daily activities, but getting the data in the needed format can be a challenge. The {frame\_calendar} function from {sugrrants} provides convenient syntax to format data in the right format https://t.co/JZHB0oUb7q#rstats #DataScience pic.twitter.com/q5Vv5wcShM

— R Function A Day (@rfunctionaday) October 7, 2021

## October 8

Sometimes you have to present results from a regression model in a well-formatted table. The {as\_flextable} function from {flextable} can easily produce such tables with rich details https://t.co/trfvqzqhvp#rstats #Data-Science pic.twitter.com/cXx7iyUXh6

— R Function A Day (@rfunctionaday) October 8, 2021

#### October 9

Sometimes you may wish to sample only a portion of the data. The {slice} function family from {dplyr} provides helpers to do so https://t.co/4tt17FnvnM#rstats #DataScience pic.twitter.com/9e8pS7KjFn

— R Function A Day (@rfunctionaday) October 9, 2021

#### October 10

In order to ensure reproducibility, we may want to include detailed session information in our report. The {session\_info} function from {sessioninfo} creates such a log https://t.co/C9RyxMnXNk#rstats #DataScience pic.twitter.com/QH0SkjztL6

— R Function A Day (@rfunctionaday) October 10, 2021

## October 11

If you use a function that outputs content that you often need to copy-paste, you may wish to do this programmatically than manually. The  $\{\text{write\_clip}\}\$  function from  $\{\text{clipr}\}\$  allows you to do this! https://t.co/LI9QxOqguP#rstats#DataScience pic.twitter.com/CZM86KxLlL

— R Function A Day (@rfunctionaday) October 11, 2021

## October 12

Sometimes you may wish to customize how {ggplot2} axes are drawn (e.g. adding brackets). The {coord\_flex\_\*} function family from {lemon} supports such customizations https://t.co/DNHBbSx5Io#rstats#DataScience pic.twitter.com/SJzVPftyqQ

— R Function A Day (@rfunctionaday) October 12, 2021

## October 13

Often we may wish to compute descriptive and inferential statistics by giving different weights across data points. The {weighted\_\*} function family from {sjstats} provides familiar syntax to carry out weighted analysis https://t.co/x9Ng6317As#rstats#DataScience pic.twitter.com/mEE7MIlkPE

— R Function A Day (@rfunctionaday) October 13, 2021

#### October 14

Treemaps visualize nested proportions for multiple categorical variables by recursively nesting rectangles (area = proportion) inside each other. The {geom\_treemap} function from {treemapify} supplies needed geometric layer! https://t.co/i1Pc58pewr#rstats #DataScience pic.twitter.com/9ccyphWC76

— R Function A Day (@rfunctionaday) October 14, 2021

## October 15

Although often you can write data to a single CSV file, sometimes you may need to write several datasets to multiple Excel spreadsheets. The {write\_xlsx} function from {writexl} provides an easy syntax to do so! https://t.co/EsBmWyupeB#rstats#DataScience pic.twitter.com/9631CZzFM5

— R Function A Day (@rfunctionaday) October 15, 2021

#### October 16

Sometimes we may wish to center variables (subtract from mean, i.e.) in a dataframe (e.g. to interpret interaction terms in regression analysis). The {center} function from {datawizard} does this flexibly 0 https://t.co/2KaDrn47w4#rstats #DataScience pic.twitter.com/KcfRGT1qF5

— R Function A Day (@rfunctionaday) October 16, 2021

## October 17

Sometimes you not only wish to create a visualization with  $\{ggplot2\}$ , but also to add additional filters to it. The  $\{with\_*\}$  function family from  $\{ggfx\}$  provides a rich collection of such filters! https://t.co/ekCrUTvFHV#rstats #DataScience pic.twitter.com/nnlVunnFyR

— R Function A Day (@rfunctionaday) October 17, 2021

## October 18

If the data to be wrangled is highly non-rectangular, you may wish to melt it down first and then wrangle it further. The {melt\_\*} function family from

 ${\rm \{meltr\}}$  allows you to do this https://t.co/gYmWI1xIQA#rstats #Data-Science pic.twitter.com/3nJcnrB9rP

— R Function A Day (@rfunctionaday) October 18, 2021

## October 19

If you work with text data, sometimes you might need to detect the text language. The eponymous function from {franc} can detect text from 310 languages!  $https://t.co/KOSWDsHQWH\#rstats\ \#DataScience\ pic.twitter.com/0KZbgor1iW$ 

— R Function A Day (@rfunctionaday) October 19, 2021

## October 20

Sometimes you may wish to quickly prepare a frequency table but present it as a visualization. The {ggtable} function from {GGally} provides an easy syntax to do so in {ggplot2}-framework! https://t.co/NqgdhgImbo#rstats #DataScience pic.twitter.com/TqA4mQI06R

— R Function A Day (@rfunctionaday) October 20, 2021

## October 21

In order to speed up, you may want to return cached results if same inputs are provided to a computationally expensive function. The  $\{\text{memoise}\}\$  function from the eponymous does exactly this! https://t.co/vT2edZhCZo#rstats#DataScience pic.twitter.com/BidZlofr8v

— R Function A Day (@rfunctionaday) October 21, 2021

## October 22

If you have a lot of overlapping data points, you could wish to simultaneously estimate their overlap and individuate them. The {geom\_pointdensity} function from {ggpointdensity} provides the perfect geometric layer! https://t.co/OeFMabDKZg#rstats#DataSciencepic.twitter.com/tUtP6Jw6pI

— R Function A Day (@rfunctionaday) October 22, 2021

#### October 23

Often you need to list all active processes on your system, but instead of using a task manager, you may wish to do it from R itself. The  $\{ps\}$  function from the eponymous creates an informative dataframe of active processes https://t.co/KVrBiD4mUE#rstats #DataScience pic.twitter.com/ORYvnaTGV5

— R Function A Day (@rfunctionaday) October 23, 2021

## October 24

If you are fluent in R and wish to learn SQL, it can be nifty to have a function that can provide a syntax translation between the two. The {translate\_sql} function from {dbplyr} provides such translations https://t.co/cS6zPgdFNn#rstats #DataScience pic.twitter.com/Jafa31i673

— R Function A Day (@rfunctionaday) October 24, 2021

## October 25

If the data is stored in Excel spreadsheets and needs to be imported into R, we may sometimes wish to have it in the tidy data format. The  $\{xlsx\_cells\}$  function from  $\{tidyxl\}$  makes such import straightforward https://t.co/hcAgiuyCON#rstats#DataScience pic.twitter.com/8VFCVEDaok

— R Function A Day (@rfunctionaday) October 25, 2021

## October 26

Donut charts are a popular way to visualize categorical data, but making a well-labelled donut chart can be time-consuming. The {ggdonutchart} function from {ggpubr} produces them easily! https://t.co/VdLvfSyFZH#rstats #Data-Science pic.twitter.com/l1k5na75wL

— R Function A Day (@rfunctionaday) October 26, 2021

## October 27

If you do iterative analysis in list columns using {purrr} , you understand the frustration of figuring out which iteration produces warnings or er-

rors. The {map\_peacefully} wrapper function from {collateral} comes to help https://t.co/gqFb0FM8ov#rstats #DataScience pic.twitter.com/CGzrIMSwI6

— R Function A Day (@rfunctionaday) October 27, 2021

## October 28

Sometimes we may need to convert a {ggplot2} image in a vector graphics format to a raster image. The {rasterise} function from {ggrastr} can convert one or many ggplot2 layer(s) into a rasterized output https://t.co/nrLWwoYwEi#rstats #DataScience pic.twitter.com/e3wI9Y5bvk

— R Function A Day (@rfunctionaday) October 28, 2021

## October 29

Google spreadsheets make it easy to create and edit files in real-time while collaborating online, and sometimes we may wish to access them from R.The {read\_sheet} function from {googlesheets4} provides a way to do so https://t.co/dj4tkk9My2#rstats #DataScience pic.twitter.com/zHFgcWqNxf

— R Function A Day (@rfunctionaday) October 29, 2021

## October 30

If you work a lot with time-of-day data, the {hms} function from the eponymous provides a convenient way to construct and store them in a dataframe, and has consistent coercion rules https://t.co/0ViYWZrGLX#rstats#DataScience pic.twitter.com/jbwyxuzLiC

— R Function A Day (@rfunctionaday) October 30, 2021

## October 31

If you have a lot of overlapping data points, you could wish to visualize their density by plotting points next to each other. The  $\{geom\_beeswarm\}$  function from  $\{ggbeeswarm\}$  provides the perfect geometric layer! https://t.co/YCc94sGUTN#rstats#DataScience pic.twitter.com/rbdaQtqqqB

— R Function A Day (@rfunctionaday) October 31, 2021

# November 2021

## November 1

If you write documents using R, you may wish to spell check to find possible spelling mistakes. The {spell\_check\_\*} function family from {spelling} makes this easy for selected text, a collection of documents, or a package https://t.co/IxvzK0f9r1#rstats #DataScience pic.twitter.com/9bkSWUjakn

— R Function A Day (@rfunctionaday) November 1, 2021

## November 2

Sometimes we may wish to check all relevant assumptions for a linear regression model in one go. The  $\{gg\_diagnose\}$  function from  $\{lindia\}$  does this for lm objects and provides helpful  $\{ggplot2\}$  visualizations https://t.co/12Q5NT3c6P#rstats#DataScience pic.twitter.com/1bMYhDxosT

— R Function A Day (@rfunctionaday) November 2, 2021

## November 3

Sometimes you need to display two plots, not in a grid, but one inside the other (aka "inset" plot). Assuming you are using the grammar of graphics approach, this is easy to do using {inset\_element} function from {patchwork}! https://t.co/H2A9Yh0W6f#rstats #DataScience pic.twitter.com/2diq1akqay

— R Function A Day (@rfunctionaday) November 3, 2021

#### November 4

Even after doing everything you can in R, sometimes you may want to further improve the performance of your code by rewriting it in

C++.The {cppFunction} from {Rcpp} provides a convenient way to do so! https://t.co/xL92m6Jlub#rstats #DataScience pic.twitter.com/MIlRxRciMN

— R Function A Day (@rfunctionaday) November 4, 2021

## November 5

A dot plot is a simple yet informative way to visualize the distribution of continuous or quantitative variables. The {geom\_dotsinterval} function from {ggdist} provides the needed geometric layer! https://t.co/n67JhkqJfr#rstats#Data-Science pic.twitter.com/XuqilSWBbj

— R Function A Day (@rfunctionaday) November 5, 2021

## November 6

When numerous key-pair values are specified in an environment, R's performance can degrade because of a significant amount of memory leakage. The {fastmap} function from the eponymous provides a more performant alternative! https://t.co/H7dZxlZixI#rstats #DataScience pic.twitter.com/Hxai0xP0KZ

— R Function A Day (@rfunctionaday) November 6, 2021

## November 7

While exploring data, one often needs a quick and easy way to create dot-and-whisker plots of coefficient estimates for regression models. The {plot\_model} function from {sjPlot} produces such plots for a wide range models https://t.co/S4iMdhxUbB#rstats #DataScience pic.twitter.com/azkYut7LkL

— R Function A Day (@rfunctionaday) November 7, 2021

## November 8

While analyzing text data, if you filter out stop words, you may wish to have them readily available in R.The {generate\_stoplist} function from {tidystopwords} provides them in more than 100 languages! https://t.co/fZK57AClCG#rstats#DataScience pic.twitter.com/R4aYJzr7CF

— R Function A Day (@rfunctionaday) November 8, 2021

## November 9

If you have a complex study design, before simulating it, you may first wish to validate it with a mock dataset. The  $\{check\_design\}$  function from  $\{faux\}$  provides a quick and easy visual way to do so! https://t.co/N20EV0caL7#rstats#DataScience pic.twitter.com/dcG5cpLJ3j

— R Function A Day (@rfunctionaday) November 9, 2021

## November 10

Sometimes you may need to operate on video files in R (e.g., change file format, convert to images, etc.). The  $\{av\_*\}$  function family from  $\{av\}$  provides numerous helpers to this end! https://t.co/v5mgjqqCQr#rstats#DataScience pic.twitter.com/21DWBeT0gq

— R Function A Day (@rfunctionaday) November 10, 2021

## November 11

If RStudio is your preferred IDE for R, you may wish to list and change your current preferences programmatically, rather than pointing and clicking. The {\* \_rstudio\_prefs} function family in {rstudio.prefs} provides this! https://t.co/IXw9ciTFZ7#rstats #DataScience pic.twitter.com/IwTJHUFjle

— R Function A Day (@rfunctionaday) November 11, 2021

## November 12

Lorenz curves provide a good way to visualize inequality in the distribution of a variable (like wealth). The {stat\_lorenz} function from {gglorenz} provides the needed geometric layer to create such a curve easily https://t.co/AJpWz8rHCr#rstats#DataScience pic.twitter.com/4bCGp9mrQq

— R Function A Day (@rfunctionaday) November 12, 2021

## November 13

Sometimes you may wish to quickly prepare a frequency table for categorical variables. The {datasummary\_crosstab} function from {modelsummary}

provides output with rich details! https://t.co/ropUkhXb1v#rstats #Data-Science pic.twitter.com/plsTArmYA1

— R Function A Day (@rfunctionaday) November 13, 2021

## November 14

If you have a number of rows in your visualization, you may wish to individuate them with the help of different background colours. The  $\{geom\_stripped\_rows\}$  function from  $\{GGally\}$  provides the perfect geometric layer! https://t.co/S12QxH4r8Y#rstats #DataScience pic.twitter.com/DnEgVri8yc

— R Function A Day (@rfunctionaday) November 14, 2021

## November 15

If you are used to doing string interpolation in R using the {glue} , you may wish to have a similar helper while writing SQL queries. The {glue\\_sql} function cleverly handles SQL quoting while writing queries https://t.co/3zGFUR1m2e#rstats#DataScience pic.twitter.com/jeAVIRZaYS

— R Function A Day (@rfunctionaday) November 15, 2021

## November 16

Given the diversity of time series classes in the R ecosystem, you may wish to have a universal converter for interchanging classes. The  $\{ts\_*\}$  function family in  $\{tsbox\}$  provides just the tools! https://t.co/yqNT5DaLns#rstats#Data-Science pic.twitter.com/Yf8vMAMIjt

— R Function A Day (@rfunctionaday) November 16, 2021

#### November 17

For correlation hypotheses, one may wish to simultaneously visualize both the joint and the marginal distributions. The {ScatterHist} function from {WVPlots} does this by default (with statistical summary as a plus) https://t.co/DjZxh7OGG5#rstats#DataScience pic.twitter.com/Se1tOBNLR0

— R Function A Day (@rfunctionaday) November 17, 2021

#### November 18

If you use project-oriented workflows, instead of changing a working directory, you may wish to construct file paths relative to the top-level directory. The eponymous function from {here} provides this functionality https://t.co/qutCsLDu8e#rstats#DataScience pic.twitter.com/0HYc2zVDu6

— R Function A Day (@rfunctionaday) November 18, 2021

## November 19

Sometimes you need to rank-transform your data, present either in a vector or in a dataframe. The {ranktransform} function from {datawizard} allows you to do this quite flexibly! 1 2 3 https://t.co/S5i3g69jn6#rstats #DataScience pic.twitter.com/ySPWE7VpFe

— R Function A Day (@rfunctionaday) November 19, 2021

## November 20

Pie charts provide an informative but imperfect way to visualize categorical data, but squared pie (or waffle) charts overcome some of these imperfections. The {waffle} function from the eponymous easily produces them  $https://t.co/OxtCuCMhHF\#rstats\ \#DataScience\ pic.twitter.com/1ui2OqHJ8k$ 

— R Function A Day (@rfunctionaday) November 20, 2021

## November 21

Apache Spark is a popular platform for large-scale data processing, and you may wish to use the familiar dataframe-based workflows with it from R.The  $\{copy\_to\}$  function from  $\{sparklyr\}$  can convert dataframes to Spark objects! https://t.co/YpsY9738WF#rstats #DataScience pic.twitter.com/TPWcsNraPK

— R Function A Day (@rfunctionaday) November 21, 2021

#### November 22

Sometimes we wish to combine various figures into a single, compound figure to convey an overarching point. The {plot\_grid} function from {cowplot} pro-

vides a way to do so flexibly! https://t.co/5cQUrPQpJz#rstats #DataScience pic.twitter.com/VONCYetz1x

— R Function A Day (@rfunctionaday) November 22, 2021

## November 23

If you use  $\{dm\}$  to create data model objects representing tables in a relational database, you may wish to visualise the relations between the tables. The  $\{dm\_draw\}$  function does exactly this! https://t.co/OmDHyi8Ig9#rstats #DataScience pic.twitter.com/OHIHpLbdgG

— R Function A Day (@rfunctionaday) November 23, 2021

## November 24

Either while debugging or learning a new function, you may wish to understand its implementation logic. The  $\{flow\_view\}$  function from  $\{flow\}$  helps visualizes this logic via a flow diagram! https://t.co/f5ubm3fq7T#rstats #DataScience pic.twitter.com/yR7AS9stSk

— R Function A Day (@rfunctionaday) November 24, 2021

## November 25

During the data-wrangling stage, sometimes you may wish to compare how the dataframe at the current stage differs from the original one. The  $\{rCompare\}$  function from  $\{dataCompareR\}$  provides just the tool! https://t.co/btUd1vK0dj#rstats#DataScience pic.twitter.com/x8xGL4MUqn

— R Function A Day (@rfunctionaday) November 25, 2021

## November 26

Sometimes we may wish to assess the polarity (positive, negative, neutral) of text data. The {get\_sentiment} function from {syuzhet} provides a convenient way to approximate the sentiment of the text by sentence! https://t.co/Pv9tCBxzYM#rstats#DataScience pic.twitter.com/us9PiBzRcb

— R Function A Day (@rfunctionaday) November 26, 2021

#### November 27

The first important step of a data analysis workflow is to make sure that everything about your data "makes sense". The {diagnose} function from {dlookr} provides a detailed data diagnosis report that makes this step easy! https://t.co/UoUEdrfUTU#rstats #DataScience pic.twitter.com/eVxrpd0rjc

— R Function A Day (@rfunctionaday) November 27, 2021

## November 28

Chloropleth maps provide a convenient way to show variation in a quantitative variable across locations. The  $\{mf_map\}$  function from  $\{mapsf\}$  easily draws such maps with elegant defaults! https://t.co/QitknL32Jh#rstats#DataScience pic.twitter.com/JMCtpdEYnY

— R Function A Day (@rfunctionaday) November 28, 2021

## November 29

If we want to print an HTML document produced by Rmarkdown, we may also wish that it were paginated. The {html\_paged} function from {pagedown} provides an HTML document split into multiple pages! https://t.co/wMofeBVYuc#rstats#DataScience pic.twitter.com/L1sXZrh4Xz

— R Function A Day (@rfunctionaday) November 29, 2021

## November 30

A correlation matrix compactly shows relationships between multiple variables. But, for pipe-based workflows, it is often helpful to have them in a dataframe. The {correlate} function from {corrr} makes it easy to extract them!https://t.co/TAMnjQQTAT#rstats #DataScience pic.twitter.com/aLN7k9uvGy

— R Function A Day (@rfunctionaday) November 30, 2021

# December 2021

## December 1

ROC curves provide a convenient way to compare responses and predictions of a binomial model, and sometimes you may also need to plot multiple curves. The {geom\_roc} function {plotROC} can do it all! https://t.co/dbmEIkLfNM#rstats #DataScience pic.twitter.com/H2gejkYnvI

— R Function A Day (@rfunctionaday) December 1, 2021

## December 2

Either while learning or exploring the distribution of our data, we may wish to visualize the shape of various statistical distributions. The  $\{vdist_*\}$  function family from  $\{vistributions\}$  makes this easy! https://t.co/iqSh2nnKWF#rstats #DataScience pic.twitter.com/XDccj6H5Dy

— R Function A Day (@rfunctionaday) December 2, 2021

## December 3

A level plot displays spatial data in two rather than three dimensions, and sometimes we may wish to create such visualisation for RasterLayer objects. The {levelplot} function from {rasterVis} does so elegantly and flexibly! https://t.co/TTYvQLpIbZ#rstats #DataScience pic.twitter.com/S5g6fQUAw7

— R Function A Day (@rfunctionaday) December 3, 2021

## December 4

Sometimes you wish to remove only certain rows or columns that are completely empty instead of partly empty. The {remove\_empty\_\*} helper function family from {sjmisc} do exactly this! https://t.co/P6z56VFxPD#rstats #DataScience pic.twitter.com/zKDdFpxscn

— R Function A Day (@rfunctionaday) December 4, 2021

## December 5

Modern OS, devices, etc. offer dark mode, and you may wish to use it also for your visualizations to match this color scheme. The {dark\_theme\_\*} function family from {ggdark} offers dark mode for {ggplot2} visualizations! https://t.co/MAAA7DadAQ#rstats#DataScience pic.twitter.com/foWfo0Hquh

— R Function A Day (@rfunctionaday) December 5, 2021

## December 6

When we are interested in studying group differences, sometimes we may wish to annotate our visualizations with results from significance testing. The  $\{add\_pval\}$  from  $\{ggpval\}$  provides a way to do this! https://t.co/X1pKEeFHnG#rstats#DataSciencepic.twitter.com/xixLLhcHlE

— R Function A Day (@rfunctionaday) December 6, 2021

## December 7

If you use Qualtrics surveys to collect data on a crowdsourcing website (like MTurk), you may wish to exclude responses based on specified exclusion criteria. The  $\{\text{exclude}_*\}$  function family from  $\{\text{exclude}\}$  makes this easy! https://t.co/Nhl8MqQEXH#rstats #DataScience pic.twitter.com/CDqpV10RN1

— R Function A Day (@rfunctionaday) December 7, 2021

## December 8

To have a consistent coding style, we need to adopt a naming convention and stick to it in the codebase. The {to\_any\_case} function from {snakecase} can

help convert strings to any desired case! https://t.co/sHkKj1dLgV#rstats#DataScience pic.twitter.com/MNVuzLIrjF

— R Function A Day (@rfunctionaday) December 8, 2021

## December 9

Although descriptive statistics are helpful, computing them can be tricky, especially for complicated designs. The {suberbPlot} function from {superb} makes this easy for various designs, sampling schemes, population sizes, etc.!https://t.co/5bXZF7pt5x#rstats #DataScience pic.twitter.com/VOEofPuSxn

— R Function A Day (@rfunctionaday) December 9, 2021

## December 10

Sometimes you may wish to encode values to a shape in a visualisation but may find the default shapes to be not distinctive enough. The  $\{\text{geom\_star}\}\$  function from  $\{\text{ggstar}\}\$  provides just the shapes! https://t.co/ecTTbN44cv#rstats #DataScience pic.twitter.com/icpTqfUK2W

— R Function A Day (@rfunctionaday) December 10, 2021

#### December 11

Line charts can represent variation in quantitative values across ordered measurements (e.g. across time). The  $\{gg\_line\_facet\}$  function from  $\{simplevis\}$  creates such charts with elegant defaults https://t.co/A4k8DMTDUf#rstats#DataScience pic.twitter.com/1p1TqWH4Bz

— R Function A Day (@rfunctionaday) December 11, 2021

## December 12

Sometimes we want to adjust data by regressing out effects of selected variables. The {adjust} function from {datawizard} does so easily and flexibly! https://t.co/lI6JSpnlfb#rstats #DataScience pic.twitter.com/A3No7I2ymW

— R Function A Day (@rfunctionaday) December 12, 2021

#### December 13

Bar charts provide a great way to visualize the magnitude of the quantitative values across different categories. The  $\{bar\_chart\}$  function from  $\{ggcharts\}$  produces them easily! https://t.co/j4c3C1gVZI#rstats #DataScience pic.twitter.com/ma0Wl1J6cK

— R Function A Day (@rfunctionaday) December 13, 2021

## December 14

You may wish to prepare shareable project analysis docs, with emphasis on reproducibility and efficient project management. The  $\{wflow\_*\}$  function family from  $\{workflowr\}$  makes this easy with a version-controlled website! https://t.co/GTMWYeYuEm#rstats #DataScience pic.twitter.com/Rqi5yE6dl8

— R Function A Day (@rfunctionaday) December 14, 2021

## December 15

While annotating plotted data with labels, we may wish to do so in a way that overlap between labels is minimized. The  $\{geom\_label\_repel\}$  function from  $\{ggrepel\}$  provides a clever and performant way to do so! https://t.co/GU3SQS1YWt#rstats#DataScience pic.twitter.com/1UX56FSeNX

— R Function A Day (@rfunctionaday) December 15, 2021

## December 16

Sometimes we need to operate over a list or vector, either by position or by name, to get both the index and the value of interest. The  $\{imap\}$  function family from  $\{purrr\}$  can be of help here https://t.co/U5IHEt8hpt#rstats #DataScience pic.twitter.com/Fsyahp4tb8

— R Function A Day (@rfunctionaday) December 16, 2021

## December 17

Sometimes the rmarkdown source file alone isn't enough to reproduce the report, and additional files (e.g. data) need to be embedded. The

{embed\_\*} function family from {xfun} does so by encoding the files to base 64 format! https://t.co/oA04uKnV3F#rstats #DataScience pic.twitter.com/NA6jzbr2YN

— R Function A Day (@rfunctionaday) December 17, 2021

#### December 18

Often we need to work, not with a specific date, but rather with intervals containing start and end dates. The  $\{int\_*\}$  function family from  $\{lubridate\}$  makes it easy to operate on intervals https://t.co/beoBq6Rlr3#rstats#Data-Science pic.twitter.com/8mMnL0nJwC

— R Function A Day (@rfunctionaday) December 18, 2021

## December 19

If you inherit a folder with many files, it can be cumbersome to go through them and find missing packages to install. The  $\{\text{show}_*\}$  function family from  $\{\text{reinstallr}\}$  can list used packages and highlight the ones missing! https://t.co/KrhtH0DT2X#rstats #DataScience pic.twitter.com/nZLLvDN9jP

— R Function A Day (@rfunctionaday) December 19, 2021

## December 20

Sometimes it can be useful to mark the centroid of a group of observations with a point or with a label. The  $\{stat\_centroid\}$  function from  $\{ggpp\}$  provides a way to do so!  $https://t.co/FaAYMnOFW7\#rstats\ \#DataScience\ pic.twitter.com/gwfY7uyrPK$ 

— R Function A Day (@rfunctionaday) December 20, 2021

## December 21

During data wrangling stage, sometimes we may need to rotate the data frame (such that rows become columns and vice versa). The {rotate\_df} function from {sjmisc} provides just the tool! https://t.co/fB1vqf4uqu#rstats #Data-Science pic.twitter.com/yw2aO2oLxZ

— R Function A Day (@rfunctionaday) December 21, 2021

#### December 22

Sometimes you may wish to quickly build an elegant and sharable website. The {create\_postcard} function from {postcards} creates pretty, single-page websites with customizable Rmarkdown template! https://t.co/0eZUTkkd16#rstats #DataScience pic.twitter.com/izucxUyfQ6

— R Function A Day (@rfunctionaday) December 22, 2021

## December 23

If you wish to write functions that save data to a user's computer, you need to find an appropriate directory depending on the OS. The {user\_\*\_dir} function family from {rappdirs} makes this easy! https://t.co/XUPMngVMz9#rstats #DataScience pic.twitter.com/ps2ISHwql6

— R Function A Day (@rfunctionaday) December 23, 2021

## December 24

JSON data representation format is ubiquitous, and sometimes we might need to convert a dataframe in R to a JSON object. The {to\_json} function from {jsonify} provides a convenient and fast way to do so! https://t.co/CDUlMuB6fE#rstats#DataScience pic.twitter.com/GHQgTRWYB5

— R Function A Day (@rfunctionaday) December 24, 2021

## December 25

Sometimes you may wish to open files, directories, URLs, etc. programmatically, instead of doing it manually. The  $\{xopen\}$  function from the eponymous provides a way to so from R! https://t.co/5HxeOdvIIK#rstats#DataScience pic.twitter.com/zVpcSHOdXe

— R Function A Day (@rfunctionaday) December 25, 2021

## December 26

If you use {R6}'s implementation of encapsulated OOP in R, and sometimes you may wish to use more idiomatic functional OOP with such objects. The

eponymous function from  $\{R62S3\}$  generate S3 generics/methods for R6 classes https://t.co/s82kX21cKc#rstats #DataScience pic.twitter.com/DCXfB6wpgu

— R Function A Day (@rfunctionaday) December 26, 2021

## December 27

A Tufte handout is a thoughtfully styled document with footnotes, integration of graphics with text, and elegant typography. The  $\{tufte\_*\}$  function family from  $\{tufte\}$  helps create them via Rmarkdown https://t.co/Ca2FPorPnW#rstats #DataScience pic.twitter.com/dhyEsyj117

— R Function A Day (@rfunctionaday) December 27, 2021

## December 28

Archive files (zip, tar, etc.) collect multiple files in a single file, and you may sometimes need to use them for portability or compression. The {archive\_\*} function family from {archive} provides relevant operations in R! https://t.co/E97cRlKZrO#rstats #DataScience pic.twitter.com/a1GlbccJfV

— R Function A Day (@rfunctionaday) December 28, 2021

## December 29

YAML language is ubiquitous, especially in configuration files, and sometimes we may wish to convert R object to a YAML string. The {as.yaml} function from {yaml} makes this easy https://t.co/31Iwor6B6N#rstats#DataScience pic.twitter.com/S3YfVZovnD

— R Function A Day (@rfunctionaday) December 29, 2021

## December 30

Cox regression model is widely used in medical research to assess the effect of several risk factors on the survival time of patients. The {ggforest} function from {survminer} easily creates a forest plot of its model estimates https://t.co/YXA8LjVQY5#rstats#DataScience pic.twitter.com/S6F2KdFAUn

— R Function A Day (@rfunctionaday) December 30, 2021

## December 31

While crawling webpages, sometimes you may wish to switch between linking strategies; using either absolute or relative URLs. The  $\{url\_*\}$  function family from  $\{xml2\}$  makes these conversions easy in R! https://t.co/x1KW07bqQZ#rstats #DataScience pic.twitter.com/8cZaZ6afiy

— R Function A Day (@rfunctionaday) December 31, 2021

# January 2022

## January 1

If you use {dplyr} and {tidyr} s to wrangle data, you may wish to see some feedback about what different operations did, especially in long piped chains. The "print and pipe" operator (%P>%) from {ViewPipeSteps} does this https://t.co/izehRpk23g#rstats#DataScience pic.twitter.com/jEev5v27te

— R Function A Day (@rfunctionaday) January 1, 2022

## January 2

Inspired by other popular languages (C++, JavaScript, Python, etc.), you may also wish to use arithmetic operators in R that modify objects in place. The operator family from {infix} provide these! https://t.co/LXJmDRYAfQ#rstats#DataScience pic.twitter.com/e4AKp7a6BF

— R Function A Day (@rfunctionaday) January 2, 2022

# January 3

Bar charts are a good way to visualize categorical data, but making a well-labelled bar chart can be time-consuming. The {PlotXTabs2} function from {CGPfunctions} easily produces this chart (with additional statistical details)! https://t.co/Ig9tgpd9Gu#rstats #DataScience pic.twitter.com/kZBxlLPBZ2

— R Function A Day (@rfunctionaday) January 3, 2022

# January 4

Sometimes you need to check if a remote computer or web server is up and running. You can do so in R using the {ping} function from {pingr}!

 $https://t.co/ahm9IdRc3y\#rstats\ \#DataScience\ pic.twitter.com/FPZiRwyz0s$ 

— R Function A Day (@rfunctionaday) January 4, 2022

## January 5

Sometimes you wish to remove only certain rows or columns that are completely empty instead of partly empty. The {remove\_empty\_\*} function family from {janitor} do exactly this! https://t.co/j1RAFZv4pY#rstats #DataScience pic.twitter.com/QHb1bDzHzB

— R Function A Day (@rfunctionaday) January 5, 2022

## January 6

Kaplan-Meier estimates of survival curves can help infer differences in survival times between compared groups. The {ggsurvplot} function from {survminer} plots such curves with rich details! https://t.co/n25xxlgZiV#rstats #Data-Science pic.twitter.com/H1FbLNSlhv

— R Function A Day (@rfunctionaday) January 6, 2022

# January 7

A Bland-Altman plot helps visually assess agreement between scores of any kind (psychological questionnaires, chemical assays, etc.). The  $\{BAC\_plot\}$  function from  $\{ufs\}$  easily creates them with elegant defaults! https://t.co/zl7vSzwe26#rstats #DataScience pic.twitter.com/g73a0A6k11

— R Function A Day (@rfunctionaday) January 7, 2022

# January 8

Sometimes we may need to edit images in R, e.g. changing transparency, spatial anti-aliasing, converting to black and white, etc. The {image\_convert} function from {magick} allows many options for doing so! https://t.co/ald6jeDtOe#rstats #DataScience pic.twitter.com/ZV74ynzCtN

— R Function A Day (@rfunctionaday) January 8, 2022

## January 9

To ensure reproducibility of R script, you may wish it to download needed package versions on a certain date. The {create\_checkpoint} function from {checkpoint} creates a local library with the needed package versions! https://t.co/L8uArRuRiN #rstats #DataScience pic.twitter.com/T6R9b5W5yY

— R Function A Day (@rfunctionaday) January 9, 2022

## January 10

PCA is a popular dimensionality reduction technique and sometimes you may wish to reports its results in a report. The  $\{tab\_pca\}$  function from  $\{sjPlot\}$  produces publication-ready HTML table for PCA with elegant defaults! https://t.co/mvakHooBSf#rstats #DataScience pic.twitter.com/tULXxnRShU

— R Function A Day (@rfunctionaday) January 10, 2022

# January 11

A list is a non-atomic vector, and sometimes you may wish to convert (or flatten) it to an atomic one. The {flatten} function family from {purrr} provides helpers to do this with type stability! https://t.co/tMAS8S8RcM#rstats#DataScience pic.twitter.com/NA7zvA2Rtb

— R Function A Day (@rfunctionaday) January 11, 2022

# January 12

Across disciplines (physics, engineering, etc.), a quiver plot helps visualize vector fields as arrows, and we may need to create such a plot in R.The  $\{geom\_quiver\}$  function from  $\{ggquiver\}$  offers just the geometric layer! https://t.co/DNwPEmLFDe#rstats #DataScience pic.twitter.com/a2RZuXtKX6

— R Function A Day (@rfunctionaday) January 12, 2022

## January 13

Filename extensions (.py, .csv, .pdf, etc.) decide the characteristics and intended usage of files, and we may wish to work with them further in R.The  $\{*\_ext\}$  function family in  $\{xfun\}$  provides helpers to do so! https://t.co/Qq8IQsMb6Q#rstats#DataScience pic.twitter.com/l47PKMvzrL

— R Function A Day (@rfunctionaday) January 13, 2022

## January 14

Sometimes you want to quickly compute and visualize frequencies for all categorical variables in the data. The {inspect\_cat} function from {inspectdf} does so, while labeling most frequent levels and highlighting missing data! https://t.co/loDxpvrDGP#rstats #DataScience pic.twitter.com/aamrTwLhQh

— R Function A Day (@rfunctionaday) January 14, 2022

## January 15

Although often you can easily read data from a single CSV file, sometimes you have to read a dataset stored in one of the Excel spreadsheets. The  $\{read\_xlsx\}$  function from  $\{readxl\}$  provides an easy syntax to do so! https://t.co/TE7GJQVSS8#rstats#DataScience pic.twitter.com/XTqST8rbou

— R Function A Day (@rfunctionaday) January 15, 2022

# January 16

To save space, IP addresses are often stored as integers, and if we receive such data, we may wish to convert them to the familiar human-readable form. The {integer\_to\_ip} function from {ipaddress} makes this conversion easy! https://t.co/IqK3ihOIjc#rstats #DataScience pic.twitter.com/CvDYbKPuej

— R Function A Day (@rfunctionaday) January 16, 2022

# January 17

A horizon plot is a compact time-series data visualization to plot and compare different moving values. The {geom\_horizon} function from {ggHoriPlot}

provides just the geometric layer! https://t.co/NSA3RYIoiE#rstats #Data-Science pic.twitter.com/7uqC45DQOf

— R Function A Day (@rfunctionaday) January 17, 2022

## January 18

Sometimes, especially in the context of statistical modeling, there might be infinite or NaN's present in outputs that we may wish to replace with NAs.The {zap\_inf} helper function from {sjmisc} does exactly this! https://t.co/mrWehQheOi#rstats #DataScience pic.twitter.com/CL7qiucGd7

— R Function A Day (@rfunctionaday) January 18, 2022

## January 19

Python dictionary is an unordered data type with key-value pairs that allows accessing values, not by indexing, but via unique keys. The {py\_dict} function from {reticulate} gives you access to this data type in R! https://t.co/stxGhcedjI#rstats #DataScience pic.twitter.com/C7jiezmfad

— R Function A Day (@rfunctionaday) January 19, 2022

# January 20

Sometimes you may wish to include some patterns or images in plots for enhanced storytelling. The {image} or {pattern} function family from {pattern-plot} provides a way to do so! https://t.co/lRhdnmbQoQ#rstats #Data-Science pic.twitter.com/S1ze86OJTk

— R Function A Day (@rfunctionaday) January 20, 2022

# January 21

Serialization changes objects to a byte stream that can be saved to a binary file, while deserializing does the reverse. The  $\{q^*\}$  function family from  $\{qs\}$  provides a performant way to serialize or deserialize any R object! https://t.co/i8BNgtAQWw#rstats #DataScience pic.twitter.com/5yTJWk3z5Z

— R Function A Day (@rfunctionaday) January 21, 2022

## January 22

Visualizing data along an Archimedean spiral can efficiently reveal periodic patterns in time series data. The {spiral\_\*} function family from {spiralize} draws such spiral plots flexibly! https://t.co/5vybsvWv2e#rstats #Data-Science pic.twitter.com/c168IWhcXL

— R Function A Day (@rfunctionaday) January 22, 2022

## January 23

While working in a piped workflow, if you need to extract a single column, the syntax to do so can be a bit cumbersome. The  $\{\text{pull}\}\$  function from  $\{\text{dplyr}\}\$  provides a more readable syntax to this end! https://t.co/rCT1vcMZzX#rstats #DataScience pic.twitter.com/vEs2cc7Lw8

— R Function A Day (@rfunctionaday) January 23, 2022

## January 24

If we need to bind multiple dataframes by rows, we may first wish to check if this can be done successfully. The {compare\_df\_cols} function from {janitor} provides a summary of data types to check this! https://t.co/88zYQFdIWa#rstats#DataScience pic.twitter.com/kSCLESOBP9

— R Function A Day (@rfunctionaday) January 24, 2022

# Retirement

Today concludes this 1-year hobby project. There won't be new posts, so feel free to unfollow, but do keep revisiting! With  $> 22 \mathrm{K}$  followers in 365 posts, I guess you enjoyed reading them as I much as I'd preparing them. Best luck with your jouRneys! @patilindrajeets

— R Function A Day (@rfunctionaday) January 24, 2022