# Package: textTools (via r-universe)

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Type Package

<b>Title</b> Functions for Text Cleansing and Text Analysis
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Description A framework for text cleansing and analysis. Conveniently prepare and process large amounts of text for analysis.  Includes various metrics for word counts/frequencies that scale efficiently. Quickly analyze large amounts of text data using a text.table (a data.table created with one word (or unit of text analysis) per row, similar to the tidytext format). Offers flexibility to efficiently work with text data stored in vectors as well as text data formatted as a text.table.
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as.text.table	Convert a data.table column of character vectors into a column with one row per word grouped by a grouping column. Optionally will split
	a column of strings into vectors of constituents.

### Description

Convert a data.table column of character vectors into a column with one row per word grouped by a grouping column. Optionally will split a column of strings into vectors of constituents.

### Usage

```
as.text.table(x, text, split = NULL, group_by = NULL)
```

#### **Arguments**

x	A data.table.
text	A string, the name of the column in x containing text to un-nest.
split	A string with a pattern to split the text in text column into constituent parts.
group_by	A vector of column names to group by. Doesn't work if the group by column is a list column.

#### Value

A data.table, text column un-nested to one row per word.

```
as.text.table(
    x = as.data.table(
    list(
        col1 = c(
        "a",
        "b"
    ),
    col2 = c(
        tolower("The dog is nice because it picked up the newspaper."),
        tolower("The dog is extremely nice because it does the dishes.")
    )
    ))
    ),
    text = "col2",
    split = " "
}
```

flag\_words

flag\_words

Flag rows in a text.table with specific words

#### **Description**

Flag rows in a text.table with specific words

#### Usage

```
flag_words(x, text, flag = "flag", words)
```

#### **Arguments**

X	A text.table created by as.text.table().
text	A string, the name of the column in x to check for words to flag.
flag	A string, the name of the column created with the flag indicator.
words	A vector of words to flag x.

#### Value

A text.table, with rows marked with a 1 if the words in those rows are in the vector of words to delete, otherwise 0.

```
flag_words(
as.text.table(
  x = as.data.table(
   list(
      col1 = c(
        "a",
        "b"
      ),
      col2 = c(
        tolower("The dog is nice because it picked up the newspaper."),
        tolower("The dog is extremely nice because it does the dishes.")
      )
   )
  ),
  text = "col2",
  split = " "
),
text = "col2",
flag = "is_stopword",
words = stopwords
```

label\_parts\_of\_speech

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label\_parts\_of\_speech Add a column with the parts of speech for each word in a text.table

#### **Description**

Add a column with the parts of speech for each word in a text.table

### Usage

```
label_parts_of_speech(x, text)
```

#### **Arguments**

x A text.table created by as.text.table().

text A string, the name of the column in x to label the parts of speech.

#### Value

A text.table, with columns added for the matching part of speech and for flagging if the part of speech is for a multi-word phrase.

```
label_parts_of_speech(
as.text.table(
  x = as.data.table(
   list(
      col1 = c(
        "a",
        "b"
      ),
      col2 = c(
        tolower("The dog is nice because it picked up the newspaper."),
        tolower("The dog is extremely nice because it does the dishes.")
   )
  ),
  text = "col2",
  split = " "
),
text = "col2"
```

6 ngrams

1\_pos

Parts of speech for English words from the Moby Project.

#### **Description**

Parts of speech for English words/phrases from the Moby Project by Grady Ward. Words with non-ASCII characters have been removed. One row per word.

#### Usage

1\_pos

#### **Format**

Data.table with 227519 rows and 3 variables #'

word Lowercase English word or phrase

**pos** Lowercase English part of speech, grouped by word into a vector if a word has multiple parts of speech.

multi\_word TRUE if the word record has a space (contains multiple words), else FALSE.

#### Source

https://archive.org/details/mobypartofspeech03203gut

ngrams

Create n-grams

### **Description**

Create n-grams

```
ngrams(
    x,
    text,
    group_by = c(),
    count_col_name = "count",
    n,
    ngram_prefix = NULL
)
```

pos 7

### Arguments

x A text.table created by as.text.table().

text A string, the name of the column in x to build n-grams with.

group\_by A vector of column names to group by. Doesn't work if the group by column is a list column.

count\_col\_name A string, the name of the output column containing the number of times each base record appears in the group.

n A integer, the number of grams to make.

ngram\_prefix A string, a prefix to add to the output n-gram columns.

#### Value

A text.table, with columns added for n-grams (the word, the count, and percent of the time the gram follows the word).

#### **Examples**

```
ngrams(
as.text.table(
  x = as.data.table(
    list(
      col1 = c(
        "a",
        "b"
      ),
      col2 = c(
        tolower("The dog is nice because it picked up the newspaper."),
        tolower("The dog is extremely nice because it does the dishes.")
    )
  ),
  text = "col2",
  split = " "
),
text = "col2",
group_by = "col1",
n = 2
)
```

Parts of speech for English words from the Moby Project.

#### **Description**

pos

Parts of speech for English words/phrases from the Moby Project by Grady Ward. Words with non-ASCII characters have been removed. One row per word + part of speech

8 regex\_sentence

#### Usage

pos

#### **Format**

Data.table with 246690 rows and 3 variables #'

word Lowercase English word or phrase

pos Lowercase English part of speech, one per row

multi\_word TRUE if the word record has a space (contains multiple words), else FALSE.

#### **Source**

https://archive.org/details/mobypartofspeech03203gut

regex\_paragraph Regular expression that might be used to split strings of text into component paragraphs.

#### **Description**

"\n", A regular expression to split strings when encountering a new line.

#### Usage

regex\_paragraph

#### **Format**

A string

regex\_sentence Regular expression that might be used to split strings of text into component sentences.

#### **Description**

"[.?!]\s", A regular expression to split strings when encountering a common end of sentence punctuation pattern.

### Usage

regex\_sentence

#### **Format**

A string

regex\_word 9

regex\_word

Regular expression that might be used to split strings of text into component words.

#### **Description**

" ", A regular expression to split strings when encountering a space.

#### Usage

```
regex_word
```

#### **Format**

A string

rm\_frequent\_words

Delete rows in a text.table where the number of identical records within a group is more than a certain threshold

#### **Description**

Delete rows in a text.table where the number of identical records within a group is more than a certain threshold

### Usage

```
rm_frequent_words(
    x,
    text,
    count_col_name = NULL,
    group_by = c(),
    max_count,
    max_count_is_ratio = FALSE,
    total_count_col = NULL
)
```

#### **Arguments**

x A text.table created by as.text.table().

text A string, the name of the column in x used to determine deletion of rows based

on the term frequency.

count\_col\_name A string, the name to assign to the new column containing the count of each

word. If NULL, does not return the counts.

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group\_by A vector of column names to group by. Doesn't work if the group by column is a list column.

max\_count A number, the maximum number of times a word can occur to keep.

max\_count\_is\_ratio

TRUE/FALSE, if TRUE, implies the value passed to max\_count should be considered a ratio.

total\_count\_col

Name of the column containing the denominator (likely total count of records within a group) to use to calculate the ratio of a word count vs total if max\_count\_is\_ratio is TRUE.

#### Value

A text.table, with rows having a duplicate count over a certain threshold deleted.

#### **Examples**

```
rm_frequent_words(
as.text.table(
  x = as.data.table(
   list(
      col1 = c(
        "a",
        "b"
      ),
      col2 = c(
        tolower("The dog is nice because it picked up the newspaper."),
        tolower("The dog is extremely nice because it does the dishes.")
   )
  ),
  text = "col2",
  split = " "
),
text = "col2",
count_col_name = "count",
max\_count = 1
```

 ${\tt rm\_infrequent\_words}$ 

Delete rows in a text.table where the number of identical records within a group is less than a certain threshold

#### **Description**

Delete rows in a text.table where the number of identical records within a group is less than a certain threshold

rm\_infrequent\_words 11

#### Usage

```
rm_infrequent_words(
    x,
    text,
    count_col_name = NULL,
    group_by = c(),
    min_count,
    min_count_is_ratio = FALSE,
    total_count_col = NULL
)
```

#### **Arguments**

x A text.table created by as.text.table().

text A string, the name of the column in x used to determine deletion of rows based

on the term frequency.

count\_col\_name A string, the name to assign to the new column containing the count of each

word. If NULL, does not return the counts.

group\_by A vector of column names to group by. Doesn't work if the group by column is

a list column.

min\_count A number, the minimum number of times a word must occur to keep.

min\_count\_is\_ratio

TRUE/FALSE, if TRUE, implies the value passed to min\_count should be con-

sidered a ratio.

total\_count\_col

Name of the column containing the denominator (likely total count of records within a group) to use to calculate the ratio of a word count vs total if min\_count\_is\_ratio

is TRUE.

#### Value

A text.table, with rows having a duplicate count of less than a certain threshold deleted.

rm\_long\_words

```
),
  text = "col2",
  split = " "
),
text = "col2",
count_col_name = "count",
min\_count = 4
rm_infrequent_words(
as.text.table(
  x = as.data.table(
    list(
      col1 = c(
        "a",
"b"
      ),
      col2 = c(
        tolower("The dog is nice because it picked up the
        newspaper and it is the nice kind of dog."),
        tolower("The dog is extremely nice because it does the dishes
        and it is cool.")
   )
  ),
  text = "col2",
  split = " "
),
text = "col2",
count_col_name = "count",
group_by = "col1",
min\_count = 2
```

rm\_long\_words

Delete rows in a text.table where the word has more than a minimum number of characters

#### **Description**

Delete rows in a text.table where the word has more than a minimum number of characters

### Usage

```
rm_long_words(x, text, max_char_length)
```

### **Arguments**

Χ

A text.table created by as.text.table().

rm\_no\_overlap 13

text

A string, the name of the column in x used to determine deletion of rows based on the number of characters.

max\_char\_length

A number, the maximum number of characters allowed to not delete a row.

#### Value

A text.table, with rows having more than a certain number of characters deleted.

### Examples

```
rm_long_words(
as.text.table(
 x = as.data.table(
   list(
      col1 = c(
        "a",
        "b"
      ),
      col2 = c(
        tolower("The dog is nice because it picked up the newspaper."),
        tolower("The dog is extremely nice because it does the dishes.")
   )
 ),
 text = "col2",
 split = " "
),
text = "col2",
max_char_length = 4
```

rm\_no\_overlap

Delete rows in a text.table where the records within a group are not also found in other groups (overlapping records)

#### **Description**

Delete rows in a text.table where the records within a group are not also found in other groups (overlapping records)

```
rm_no_overlap(x, text, group_by = c())
```

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### **Arguments**

A text.table created by as.text.table(). Χ text A string, the name of the column in x to determine deletion of rows based on the lack of presence of overlapping records. A vector of column names to group by. Doesn't work if the group by column is group\_by

a list column.

#### Value

A text.table, with rows not having records found in multiple groups (overlapping records) deleted.

#### **Examples**

```
rm_no_overlap(
as.text.table(
  x = as.data.table(
    list(
      col1 = c(
        "a",
        "b"
      ),
      col2 = c(
        tolower("The dog is nice because it picked up the newspaper."),
        tolower("The dog is extremely nice because it does the dishes.")
   )
  ),
  text = "col2",
  split = " "
text = "col2",
group_by = "col1"
```

rm\_overlap

Delete rows in a text.table where the records within a group are also found in other groups (overlapping records)

#### **Description**

Delete rows in a text.table where the records within a group are also found in other groups (overlapping records)

```
rm_overlap(x, text, group_by = c())
```

rm\_parts\_of\_speech 15

### Arguments

x A text.table created by as.text.table().

text A string, the name of the column in x to determine deletion of rows based on the presence of overlapping records.

group\_by A vector of column names to group by. Doesn't work if the group by column is a list column.

#### a list colui

#### Value

A text.table, with rows having records found in multiple groups (overlapping records) deleted.

### Examples

```
rm_overlap(
as.text.table(
  x = as.data.table(
   list(
      col1 = c(
        "a",
        "b"
      ),
      col2 = c(
        tolower("The dog is nice because it picked up the newspaper."),
        tolower("The dog is extremely nice because it does the dishes.")
    )
  ),
  text = "col2",
  split = " "
),
text = "col2",
group_by = "col1"
```

rm\_parts\_of\_speech

Delete rows in a text.table where the word has a certain part of speech

#### **Description**

Delete rows in a text.table where the word has a certain part of speech

```
rm_parts_of_speech(
    x,
    text,
    pos_delete = c("adjective", "adverb", "conjunction", "definite article",
        "interjection", "noun", "noun phrase", "plural", "preposition", "pronoun",
        "verb (intransitive)", "verb (transitive)", "verb (usu participle)")
)
```

16 rm\_regexp\_match

#### **Arguments**

A text.table created by as.text.table(). Х A string, the name of the column in x used to determine deletion of rows based text on the part of speech. pos\_delete A vector of parts of speech to delete. At least one of the following: 'adjective', 'adverb', 'conjunction', 'definite article', 'interjection', 'noun', 'noun phrase',

'plural', 'preposition', 'pronoun', 'verb (intransitive)', 'verb (transitive)', 'verb

(usu participle)'

#### Value

A text.table, with rows matching a part of speech deleted.

#### **Examples**

```
rm_parts_of_speech(
as.text.table(
 x = as.data.table(
   list(
      col1 = c(
        "a",
        "b"
      ),
      col2 = c(
        tolower("The dog is nice because it picked up the newspaper."),
        tolower("The dog is extremely nice because it does the dishes.")
      )
   )
 ),
 text = "col2",
 split = " "
),
text = "col2",
pos_delete = "conjunction"
```

rm\_regexp\_match

Delete rows in a text.table where the record has a certain pattern indicated by a regular expression

#### **Description**

Delete rows in a text.table where the record has a certain pattern indicated by a regular expression

```
rm_regexp_match(x, text, pattern)
```

rm\_short\_words 17

#### **Arguments**

x A text.table created by as.text.table().

text A string, the name of the column in x used to determine deletion of rows based

on the regular expression.

pattern A regular expression, gets passed to grepl().

#### Value

A text.table, with rows having a certain pattern indicated by a regular expression deleted.

#### **Examples**

```
rm_regexp_match(
as.text.table(
  x = as.data.table(
   list(
      col1 = c(
        "a",
        "b"
      ),
      col2 = c(
        tolower("The dog is nice because it picked up the newspaper."),
        tolower("The dog is extremely nice because it does the dishes.")
   )
 ),
  text = "col2",
  split = " "
),
text = "col2",
pattern = "do"
```

rm\_short\_words

Delete rows in a text.table where the word has less than a minimum number of characters

### Description

Delete rows in a text.table where the word has less than a minimum number of characters

```
rm_short_words(x, text, min_char_length)
```

rm\_words

### Arguments

x A text.table created by as.text.table().

text A string, the name of the column in x used to determine deletion of rows based on the number of characters.

min\_char\_length

A number, the minimum number of characters required to not delete a row.

#### Value

A text.table, with rows having less than a certain number of characters deleted.

### **Examples**

```
rm_short_words(
as.text.table(
  x = as.data.table(
    list(
      col1 = c(
        "a",
        "b"
      ),
      col2 = c(
        tolower("The dog is nice because it picked up the newspaper."),
        tolower("The dog is extremely nice because it does the dishes.")
   )
  ),
  text = "col2",
  split = " "
),
text = "col2",
min_char_length = 4
```

rm\_words

Remove rows from a text.table with specific words

#### **Description**

Remove rows from a text.table with specific words

#### Usage

```
rm_words(x, text, words = stopwords)
```

#### Arguments

x A text.table created by as.text.table().

text A string, the name of the column in x to check for words to delete.

words A vector of words to delete from x.

sampleStr 19

#### Value

A text.table, with rows deleted if the words in those rows are in the vector of words to delete.

### **Examples**

```
rm_words(
as.text.table(
  x = as.data.table(
   list(
      col1 = c(
        "a",
        "b"
      ),
      col2 = c(
        tolower("The dog is nice because it picked up the newspaper."),
        tolower("The dog is extremely nice because it does the dishes.")
   )
  ),
  text = "col2",
  split = " "
),
text = "col2"
)
```

sampleStr

Generates (pseudo)random strings of the specified char length

### Description

Generates (pseudo)random strings of the specified char length

#### Usage

```
sampleStr(char)
```

### Arguments

char

A integer, the number of chars to include in the output string.

### Value

A string.

```
sampleStr(10)
```

20 str\_any\_match

stopwords

Vector of lowercase English stop words.

### Description

Unique lowercase English stop words from 3 lexicons combined into one vector. Combines snow-ball, onix, and SMART lists of stopwords.

#### Usage

stopwords

#### **Format**

A vector of 728 unique English stop words in lowercase

#### **Source**

```
http://snowball.tartarus.org/algorithms/english/stop.txt
http://www.lextek.com/manuals/onix/stopwords1.html
http://www.lextek.com/manuals/onix/stopwords2.html
```

str\_any\_match

Detect if there are any words in a vector also found in another vector.

### Description

Detect if there are any words in a vector also found in another vector.

#### Usage

```
str_any_match(x, y)
```

#### **Arguments**

x A vector of words.

y A vector of words to test against.

#### Value

TRUE/FALSE, TRUE if any words in x are also in y

str\_counts 21

#### **Examples**

```
str_any_match(
x = c("a", "dog", "went", "to", "the", "store"),
y = c("the")
)
str_any_match(
x = c("a", "dog", "went", "to", "the", "store"),
y = c("apple")
)
```

str\_counts

Create a list of a vector of unique words found in x and a vector of the counts of each word in x.

### **Description**

Create a list of a vector of unique words found in x and a vector of the counts of each word in x.

### Usage

```
str_counts(x)
```

### Arguments

Χ

A vector of words.

#### Value

A list, position one is a vector of unique and sorted words from x, position two is a vector of the counts for each word.

```
str_counts(
x = c("a", "dog", "went", "to", "the", "store", "and", "a", "dog", "went", "to", "another", "store")
)
```

str\_count\_intersect

Count the intersecting words in a vector that are found in another vector (only counts unique words).

#### **Description**

Count the intersecting words in a vector that are found in another vector (only counts unique words).

#### Usage

```
str_count_intersect(x, y)
```

#### **Arguments**

- x A vector of words.
- y A vector of words to test against.

#### Value

A number, the count of unique words in x also in y

### **Examples**

```
str_count_intersect(
x = c("a", "dog", "went", "to", "the", "store"),
y = c("dog", "to", "store")
)
```

```
str_count_jaccard_similarity
```

Calculates the intersect divided by union of two vectors of words.

### Description

Calculates the intersect divided by union of two vectors of words.

### Usage

```
str_count_jaccard_similarity(x, y)
```

#### **Arguments**

- x A vector of words.
- y A vector of words to test against.

str\_count\_match 23

#### Value

A number, the intersect divided by union of two vectors of words.

### **Examples**

```
str_count_jaccard_similarity(
x = c("a", "dog", "went", "to", "the", "store"),
y = c("this", "dog", "went", "to", "the", "store")
)
```

str\_count\_match

Count the words in a vector that are found in another vector.

#### **Description**

Count the words in a vector that are found in another vector.

#### Usage

```
str_count_match(x, y, ratio = FALSE)
```

#### **Arguments**

x A vector of words.

y A vector of words to test against.

ratio TRUE/FALSE, if TRUE, returns the number of words in x with a match in y divided by the number of words in x.

#### Value

A number, the count of words in x also in y

```
str_count_match(
x = c("a", "dog", "went", "to", "the", "store"),
y = c("dog", "to", "store")
)
str_count_match(
x = c("a", "dog", "went", "to", "the", "store"),
y = c("dog", "to", "store"),
ratio = TRUE
)
```

str\_count\_nomatch

Count the words in a vector that are not found in another vector.

### **Description**

Count the words in a vector that are not found in another vector.

#### Usage

```
str\_count\_nomatch(x, y, ratio = FALSE)
```

#### **Arguments**

x A vector of words.

y A vector of words to test against.

ratio TRUE/FALSE, if TRUE, returns the number of words in x without a match in y

divided by the number of words in x.

#### Value

A number, the count of words in x and not in y

#### **Examples**

```
str_count_nomatch(
x = c("a", "dog", "went", "to", "the", "store"),
y = c("dog", "to", "store")
)
str_count_nomatch(
x = c("a", "dog", "went", "to", "the", "store"),
y = c("dog", "store"),
ratio = TRUE
)
```

str\_count\_positional\_match

Count words from a vector that are found in the same position in another vector.

#### **Description**

Count words from a vector that are found in the same position in another vector.

```
str_count_positional_match(x, y, ratio = FALSE)
```

#### **Arguments**

y A vector of words to test against.

ratio TRUE/FALSE, if TRUE, returns the number of words in x with a positional

match in y divided by the number of words in x.

#### Value

A count of the words in x with matches in the same position in y.

### Examples

```
str_count_positional_match(
x = c("a", "dog", "went", "to", "the", "store"),
y = c("this", "dog", "ran", "from", "the", "store")
)
```

```
str_count_positional_nomatch
```

Count words from a vector that are not found in the same position in another vector.

#### **Description**

Count words from a vector that are not found in the same position in another vector.

#### Usage

```
str_count_positional_nomatch(x, y, ratio = FALSE)
```

### Arguments

x A vector of words.

y A vector of words to test against.

ratio TRUE/FALSE, if TRUE, returns the number of words in x without a positional

match in y divided by the number of words in x.

### Value

A count of the words in x without matches in the same position in y.

```
str_count_positional_nomatch(
x = c("a", "cool", "dog", "went", "to", "the", "store"),
y = c("a", "dog", "ran", "from", "the", "store")
)
```

26 str\_dt\_col\_combine

str\_count\_setdiff

Count the words in a vector that don't intersect with another vector (only counts unique words).

### Description

Count the words in a vector that don't intersect with another vector (only counts unique words).

### Usage

```
str_count_setdiff(x, y)
```

#### **Arguments**

x A vector of words.

y A vector of words to test against.

#### Value

A number, the count of unique words in x not also in y

### **Examples**

```
str_count_setdiff(
x = c("a", "dog", "dog", "went", "to", "the", "store"),
y = c("dog", "to", "store")
)
```

 $str\_dt\_col\_combine$ 

Combine columns of a data.table into a list in a new column, wraps list(unlist(c(...)))

#### **Description**

Combine columns of a data.table into a list in a new column, wraps list(unlist(c(...)))

### Usage

```
str_dt_col_combine(...)
```

#### **Arguments**

... Unquoted column names of a data.table.

### Value

A list, with columns combined into a vector if grouped properly

str\_extract\_match 27

#### **Examples**

```
as.data.table(
list(
  col1 = c(
    "a",
    "b"
  ),
  col2 = c(
    tolower("The dog is nice because it picked up the newspaper."),
    tolower("The dog is extremely nice because it does the dishes.")
  ),
  col3 = c(
    "test 1",
    "test 2"
  )
)
)[, col4 := .(str_dt_col_combine(col2, col3)), col1]
```

str\_extract\_match

Extract words from a vector that are found in another vector.

### Description

Extract words from a vector that are found in another vector.

#### Usage

```
str_extract_match(x, y)
```

#### **Arguments**

x A vector of words.

y A vector of words to test against.

#### Value

x, with the words not found in y removed.

```
str_extract_match(
x = c("a", "dog", "went", "to", "the", "store"),
y = c("dog", "to", "store")
)
```

str\_extract\_nomatch

Extract words from a vector that are not found in another vector.

### **Description**

Extract words from a vector that are not found in another vector.

#### Usage

```
str_extract_nomatch(x, y)
```

#### Arguments

x A vector of words.

y A vector of words to test against.

#### Value

x, with the words found in y removed.

### **Examples**

```
str_extract_nomatch(
x = c("a", "dog", "went", "to", "the", "store"),
y = c("dog", "to", "store")
)
```

```
str_extract_positional_match
```

Extract words from a vector that are found in the same position in another vector.

#### **Description**

Extract words from a vector that are found in the same position in another vector.

#### Usage

```
str\_extract\_positional\_match(x, y)
```

#### **Arguments**

x A vector of words.

y A vector of words to test against.

#### Value

x, with the words without matches in the same position in y removed.

### **Examples**

```
str_extract_positional_match(
x = c("a", "dog", "went", "to", "the", "store"),
y = c("this", "dog", "ran", "from", "the", "store")
)
```

```
str_extract_positional_nomatch
```

Extract words from a vector that are not found in the same position in another vector.

### Description

Extract words from a vector that are not found in the same position in another vector.

### Usage

```
str\_extract\_positional\_nomatch(x, y)
```

#### **Arguments**

x A vector of words.

y A vector of words to test against.

#### Value

x, with the words with matches found in the same position in y removed.

```
str_extract_positional_nomatch(
x = c("a", "dog", "went", "to", "the", "store"),
y = c("a", "crazy", "dog", "ran", "from", "the", "store")
)
```

30 str\_rm\_long\_words

str\_rm\_blank\_space

Remove and replace excess white space from strings.

#### Description

Remove and replace excess white space from strings.

#### Usage

```
str_rm_blank_space(x, replacement = " ")
```

### Arguments

x A vector or string.

replacement A string to replace the blank space with, defaults to " ", which replaces excess

space with a single space.

#### Value

x, with extra white space removed/replaced.

#### **Examples**

```
str_rm_blank_space(c("this is a test. ", " will it work? "))
```

str\_rm\_long\_words

Remove words from a vector that have more than a maximum number of characters.

#### **Description**

Remove words from a vector that have more than a maximum number of characters.

#### Usage

```
str_rm_long_words(x, max_char_length)
```

### Arguments

An integer, the maximum number of characters a word can have to not be removed.

#### Value

x, with the words not having a character count less than or equal to the max\_char\_length removed.

#### **Examples**

```
str_rm_long_words(
x = c("a", "dog", "went", "to", "the", "store"),
max_char_length = 2
```

```
str_rm_non_alphanumeric
```

Remove and replace non-alphanumeric characters from strings.

#### **Description**

Remove and replace non-alphanumeric characters from strings.

#### Usage

```
str_rm_non_alphanumeric(x, replacement = " ")
```

### **Arguments**

A vector or string. Χ

replacement A string to replace the numbers with, defaults to " ".

#### Value

x, with non-alphanumeric (A-z, 0-9) characters removed/replaced.

### **Examples**

```
str_rm_non_alphanumeric(c("test 67890 * % $ "))
```

str\_rm\_non\_printable Remove and replace non-printable characters from strings.

#### Description

Remove and replace non-printable characters from strings.

#### Usage

```
str_rm_non_printable(x, replacement = " ")
```

#### Arguments

A vector or string.

A string to replace the numbers with, defaults to " ". replacement

32 str\_rm\_punctuation

#### Value

x, with non-printable characters removed/replaced.

#### **Examples**

```
str_rm_non_printable(c("test \n\n67890 * % $ "))
```

str\_rm\_numbers

Remove and replace numbers from strings.

### **Description**

Remove and replace numbers from strings.

#### Usage

```
str_rm_numbers(x, replacement = "")
```

#### **Arguments**

x A vector or string.

replacement A string to replace the numbers with, defaults to "".

#### Value

x, with numbers 0-9 removed/replaced.

#### **Examples**

```
str_rm_numbers(c("test 1a234b5", "test 67890"))
```

 $str\_rm\_punctuation$ 

Remove and replace punctuation from strings.

### Description

Remove and replace punctuation from strings.

### Usage

```
str_rm_punctuation(x, replacement = "")
```

### Arguments

x A vector or string.

replacement A string to replace the punctuation with, defaults to "".

str\_rm\_regexp\_match 33

#### Value

x, with punctuation removed/replaced.

### **Examples**

```
str_rm_punctuation(c("wait, is this is a test?", "Tests: . ! ?"))
```

str\_rm\_regexp\_match

Remove words from a vector that match a regular expression.

### Description

Remove words from a vector that match a regular expression.

#### Usage

```
str_rm_regexp_match(x, pattern)
```

#### **Arguments**

x A

A vector of words.

pattern

A regular expression.

#### Value

x, with the words matching the regular expression removed.

### **Examples**

```
str_rm_regexp_match(
x = c("a", "dog", "went", "to", "the", "store"),
pattern = "to"
)
```

 $str\_rm\_short\_words$ 

Remove words from a vector that don't have a minimum number of characters.

#### **Description**

Remove words from a vector that don't have a minimum number of characters.

```
str_rm_short_words(x, min_char_length)
```

str\_rm\_words

#### **Arguments**

```
x A vector of words. min_char_length
```

An integer, the minimum number of characters a word can have to not be re-

#### Value

x, with the words not having a character count greater than or equal to the min\_char\_length removed.

#### **Examples**

```
str_rm_short_words(
x = c("a", "dog", "went", "to", "the", "store"),
min_char_length = 3
)
```

str\_rm\_words

Remove words from a vector of words found in another vector of words.

#### **Description**

Remove words from a vector of words found in another vector of words.

#### Usage

```
str_rm_words(x, y = stopwords)
```

#### **Arguments**

x A vector of words.

y A vector of words to delete from x, defaults to English stop words.

#### Value

x, with the words found in y removed.

```
str_rm_words(
x = c("a", "dog", "went", "to", "the", "store"),
y = stopwords
)

str_rm_words(
x = c("a", "dog", "went", "to", "the", "store"),
y = c("dog", "store")
)
```

```
str_rm_words_by_length
```

Remove words from a vector based on the number of characters in each word.

#### **Description**

Remove words from a vector based on the number of characters in each word.

#### Usage

```
str_rm_words_by_length(x, min_char_length = 0, max_char_length = Inf)
```

#### **Arguments**

```
x A vector of words.
```

min\_char\_length

An integer, the minimum number of characters a word can have to not be removed.

max\_char\_length

An integer, the maximum number of characters a word can have to not be removed.

#### Value

x, with the words not having a character count of at least the min\_char\_length and at most the max\_char\_length removed.

#### **Examples**

```
str_rm_words_by_length(
x = c("a", "dog", "went", "to", "the", "store"),
min_char_length = 3
)
```

```
str_stopwords_by_part_of_speech
```

Create a vector of English words associated with particular parts of speech.

### Description

Create a vector of English words associated with particular parts of speech.

36 str\_tolower

#### Usage

```
str_stopwords_by_part_of_speech(
  parts = c("adjective", "adverb", "conjunction", "definite article", "interjection",
    "noun", "noun phrase", "plural", "preposition", "pronoun", "verb (intransitive)",
        "verb (transitive)", "verb (usu participle)"),
    include_multi_word = FALSE
)
```

#### **Arguments**

parts

A vector, at least one of the following: 'adjective', 'adverb', 'conjunction', 'definite article', 'interjection', 'noun', 'noun phrase', 'plural', 'preposition', 'pronoun', 'verb (intransitive)', 'verb (transitive)', 'verb (usu participle)'

include\_multi\_word

TRUE/FALSE, if TRUE, includes records from the pos data.table where multi\_word == TRUE, otherwise excludes these records.

#### Value

A vector of words matching the part of speech shown in the data.table pos.

### **Examples**

```
str_stopwords_by_part_of_speech('adjective')
```

str\_tolower

Calls base::tolower(), which converts letters to lowercase. Only included to point out that base::tolower exists and should be used directly.

#### **Description**

Calls base::tolower(), which converts letters to lowercase. Only included to point out that base::tolower exists and should be used directly.

#### Usage

```
str_tolower(x)
```

### **Arguments**

Х

A vector or string.

#### Value

x, converted to lowercase.

### **Examples**

```
str_tolower(c("ALLCAPS", "Some capS"))
```

```
str_weighted_count_match
```

Weighted count of the words in a vector that are found in another vector.

### Description

Weighted count of the words in a vector that are found in another vector.

### Usage

```
str_weighted_count_match(x, y)
```

#### **Arguments**

- x A list of words and counts created by str\_counts(x).
- y A list of words and counts created by str\_counts(y).

#### Value

A number, the count of words in x also in y scaled by the number of times each word appears in x and y. If a word appears 3 times in x and 2 times in y, the result is 6, assuming no other words match.

```
str_weighted_count_match(
x = str_counts(c("a", "dog", "dog", "went", "to", "the", "store")),
y = str_counts(c("dog", "dog", "dog"))
)
```

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