

## User Guide for prettycloud Package

wordcloud is a graphical representation that is used to draw beautiful words. It can control the word font as well as the word color accordingly. Generally this graphical approach arranges the word either horizontally or vertically, which lacks flexibility.

prettycloud package takes a different approach by relying on the curve function to control the layout of the words. Currently it supports 4 kinds of curves to display the words following interesting graphical patterns. In the near future, we will use additional curve functions to provide more choices for users.

This package provides a few arguments such as group, weight, maxsize and minsize to control the graphical layout. User can also set the background color and font color as well. prettycloud is a very handy tool for drawing words with appropriate weight and group.

4

---

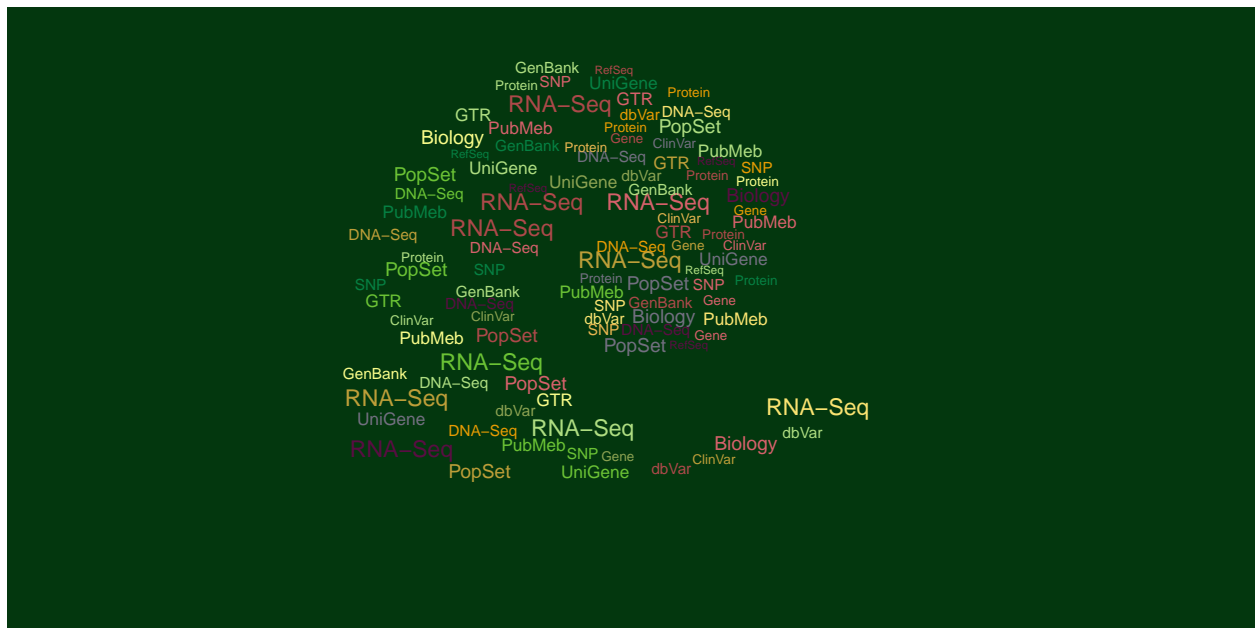
## Algorithms for Prettycloud

In this section, we will discuss the main algorithms to control the layout of the words.

### Folium of Descartes

Cartesian equation:

```
library(prettycloud)
data(bioList)
prettycloud(bioList$words[1:50],bioList$weight[1:50],maxsize=1,minsize=0.1,style=2,replication=T)
```



## Involute of a circle

Parametric Cartesian equation:

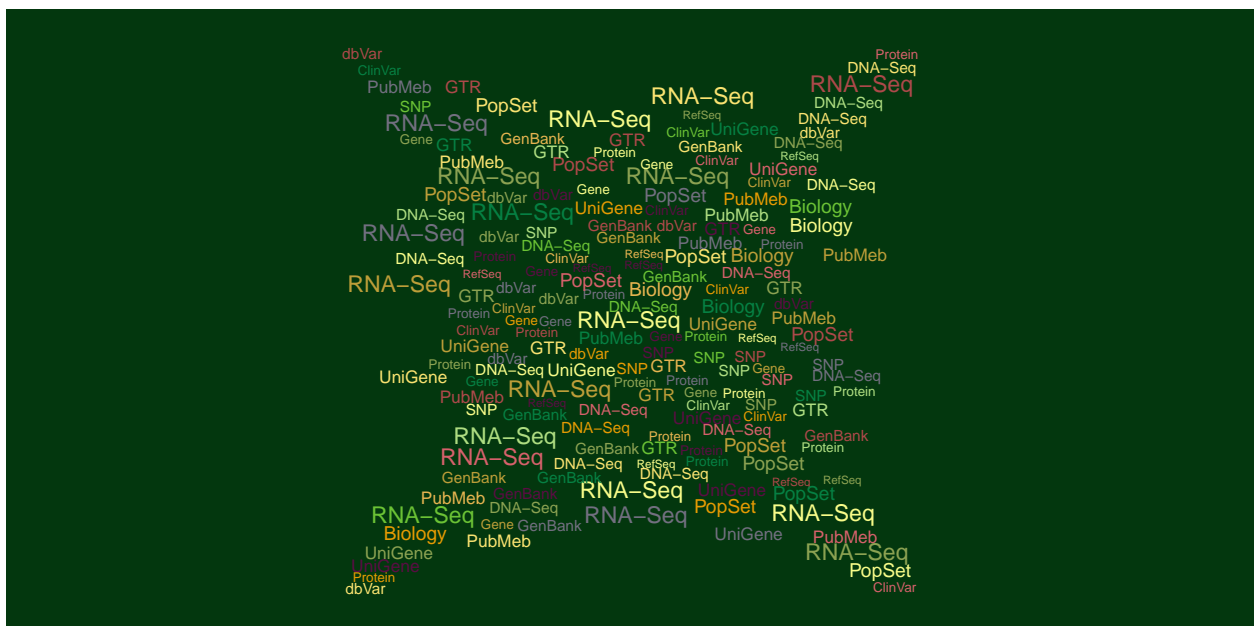
```
prettycloud(bioList$words[1:50],bioList$weight[1:50],maxsize=1,minsize=0.1,style=2,replication=T)
```



## Two Hyperbolas

Parametric Cartesian equation:

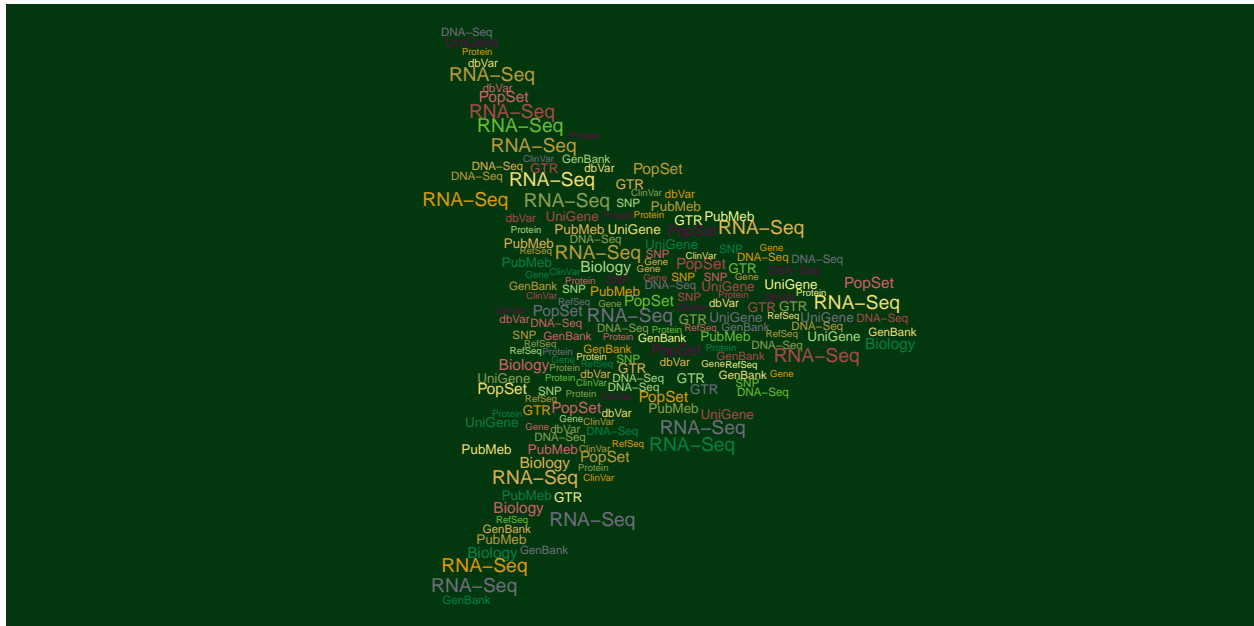
```
prettycloud(bioList$words,bioList$weight,maxsize=1,minsize=0.1,style=3,replication=T)
```



## Tricuspid

Parametric Cartesian equation:

```
prettycloud(bioList$words,bioList$weight,maxsize=0.8,minsize=0.1,style=4,replication=T)
```



## Examples

maxsize/minsize

```
data(bioList)
words<-bioList$words
weight<-bioList$weight
prettycloud(words, weight, maxsize=1, minsize=0.1, style="2")
```



background/fontcolor

```
prettycloud(letters[1:5],c(1:5),background="#000000", fontcolor=c("red","blue","#009ACD","green","white"))
```

