

# Package: bloom (via r-universe)

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**Type** Package

**Title** Bloom Filters

**Description** Scaling, counting Bloom filter for R using Rcpp bindings for dablooms.

**Version** 0.1.0

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**Imports** Rcpp (>= 0.11.3)

**LinkingTo** Rcpp

**Depends** Rcpp

**Repository** <https://jimhester.r-universe.dev>

**RemoteUrl** <https://github.com/jimhester/bloom>

**RemoteRef** HEAD

**RemoteSha** 0f009f091272113181a87fe0ef35b04c0b42ea0b

## Contents

bloom . . . . .	1
<b>Index</b>	<b>3</b>

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bloom	<i>Bloom filter</i>
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## Description

Create a new scaling, counting bloom filter, or load a bloom filter from a pre-existing file.

**Usage**

```
bloom(capacity = 1000, error_rate = 0.05, filename = tempfile(fileext = ".bin"), exists = file.exists(filename))
```

**Arguments**

capacity	the approximate expected capacity
error_rate	the desired error rate
filename	the location to store the filter
exists	if the filter exists, load the new filter from a pre-existing file, otherwise create a new filer.

**Details**

The filter has the following methods available

**add** Add a new item to the bloom filter, each item should be assigned a monotonically increasing integer id as the second argument.

**contains** Check if a given item is contained within the bloom filter.

**remove** Remove a given item from the filter, the id should match the id given when the item was added.

**Examples**

```
library(bloom)
bloom <- bloom(capacity = 1000, error_rate = .05, filename = "/tmp/bloom.bin")
bloom$add("foo", 2)
bloom$contains("bar")
bloom$contains("foo")
bloom$remove("foo", 2)
bloom$contains("foo")
bloom$add("foo", 2)
rm(bloom)
bloom <- bloom(capacity = 1000, error_rate = .05, filename = "/tmp/bloom.bin", exists = TRUE)
bloom$contains("foo")
```

# Index

bloom, 1