

# Package ‘autoLibLoad’

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**Version** 1.0

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**Title** Automate Retrieving, Building, Installing and Loading Specified Packages

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**Depends** R (>= 4.2.0)

**Imports** utils, stringr, devtools, tools, vprint

**Description** Packages required for the search path may be located in the CRAN repository, the system library, or a local directory. We automate determining the disposition of each required package, retrieving it, and loading it as needed.

**License** GPL (>= 2)

**Encoding** UTF-8

**VignetteBuilder** knitr

**Suggests** knitr, rmarkdown, testthat (>= 3.0.0)

**Config/testthat/edition** 3

**NeedsCompilation** no

**Config/roxygen2/version** 8.0.0

**Repository** CRAN

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autoLibLoad	<i>autoLibLoad</i>
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### Description

given a list of packages, which ones are available from search path, installed packages, loaded packages, local directory

### Usage

```
autoLibLoad(dir, packs, verbose = c(0, 3))
```

### Arguments

dir	character string full path name of directory containing package sources
packs	list of package names
verbose	integer param passed to vprint()

### Value

returns no value, but has side effect of modifying search() path and installing packages from CRAN

### Examples

```
## Not run:
# replace dir and packs with your own versions!!
try(remove.packages("cardUtils"))
try(detach("package:cardUtils"))
try(remove.packages("ggplot2"))
try(detach("package:ggplot2"))
dir1<-"~/personal/hearts/hearts_card_game_bayesian_inference/packages/"
dir2<-"inference_packages/inference_packages/"
dir<-sprintf("%s/%s",dir1,dir2)
packs<-c("cardUtils","clickableImageMap","ggplot2","xxxx")
l<-autoLibLoad(dir,packs)

## End(Not run)
```

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`getSysLib`*getSysLib*

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**Description**

For consistency, make sure that we are always using the designated library rather than a random library

**Usage**

```
getSysLib(verbose = 4)
```

**Arguments**

`verbose`            parameter passed to `vprint()`

**Value**

returns a character string containing the path name for the designated library

**Examples**

```
if(interactive()) {  
  sysLib<-getSysLib()  
}
```

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`is_package_on_cran2`    *is\_package\_on\_cran2*

---

**Description**

which packages in list are available on CRAN

**Usage**

```
is_package_on_cran2(pkg_names)
```

**Arguments**

`pkg_names`            list of package names

**Value**

returns a list of packages that are available on CRAN

**Examples**

```
is_package_on_cran2(c("ggplot2", "xxxxx"))
```

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loadPacks

*loadPacks*

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**Description**

load packages as required

**Usage**

```
loadPacks(packs)
```

**Arguments**

packs            list of package names

**Details**

not allowed to have direct call to library() in CRAN package version that is permitted in CRAN package - see zload() in NoviceDeveloperResources package

**Value**

returns no value, but has side effect of loading packages in search() path

**Examples**

```
## Not run:
# replace dir and packs with your own versions!!
install.packages("ggplot2")
packs<-"ggplot2"
l<-loadPacks(packs)

## End(Not run)

## Not run:
# replace pack with your own versions!!
pack<-"ggplot2"
install.packages(pack)
eval(parse(text = sprintf("library(%s, verbose=TRUE)",pack)))

## End(Not run)
```

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<code>packagesInDir</code>	<i>packagesInDir</i>
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**Description**

determine potential R packages within a given directory

**Usage**

```
packagesInDir(dir)
```

**Arguments**

`dir` character string full path name to directory holding R packages

**Value**

returns a list of potential R packages

**Examples**

```
## Not run:  
# replace dir and packs with your own versions!!  
dir1<-"~/personal/hearts/hearts_card_game_bayesian_inference/packages/"  
dir2<-"inference_packages/inference_packages/"  
dir<-sprintf("%s/%s",dir1,dir2)  
packagesInDir(dir)  
  
## End(Not run)
```

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