# Package 'testDriveR'

February 2, 2025

Type Package

Title Teaching Data for Statistics and Data Science

Version 0.5.3

**Description** Provides data sets for teaching statistics and data science courses. It includes a sample of data from John Edmund Kerrich's famous coinflip experiment. These are data that I used for statistics. The package also contains an R Markdown template with the required formatting for assignments in my former courses.

License GPL-3

URL https://chris-prener.github.io/testDriveR/,

https://github.com/chris-prener/testDriveR

BugReports https://github.com/chris-prener/testDriveR/issues

**Encoding** UTF-8

LazyData true

RoxygenNote 7.3.2

Suggests ggplot2, knitr, rmarkdown, testthat

NeedsCompilation no

Author Christopher Prener [aut, cre] (<https://orcid.org/0000-0002-4310-9888>),

Bill Bradley [dtc],

NORC at the University of Chicago [dtc],

UN Inter-agency Group for Child Mortality Estimation [dtc], U.S. Department of Energy [dtc]

Maintainer Christopher Prener <chris.prener@gmail.com>

**Repository** CRAN

Date/Publication 2025-02-02 19:20:02 UTC

# Contents

auto17																							2
childMortality									•		•	•		•		•	•			•	•	•	3

#### auto17

	gss14																												
	gss14_simple			 •	• •	•				•				 •		•	•				•		•	•	 •		•	•	5
	kerrich	•••	• •	 •	• •	•	•	•	 •	•	•	•	•	 •	•	•	•	•	 •	•	•	•	•	•	 •	•	•	•	6
Index																													7

```
auto17
```

Model Year 2017 Vehicles

# Description

A data set containing model year 2017 vehicles for sale in the United States.

# Usage

data(auto17)

# Format

A data frame with 1216 rows and 21 variables:

id DOT vehicle ID number **mfr** vehicle manufacturer mfrDivision vehicle brand carLine vehicle name carClass vehicle type, numeric carClassStr vehicle type, string cityFE fuel economy, city hwyFE fuel economy, highway combFE fuel economy, combined guzzlerStr poor fuel economy fuelStr fuel, abbrev. fuelStr2 fuel, full fuelCost estimated fuel cost displ engine displacement transStr transmission, full transStr2 transmission, abbrev. gears number of gears cyl number of cylinders airAsp air aspiration method driveStr vehicle drive type, abbrev. driveStr2 vehicle drive type, full

# childMortality

# Source

https://www.fueleconomy.gov/feg/download.shtml

# Examples

str(auto17)
head(auto17)

childMortality UNICEF Childhood Mortality Data

# Description

A data set containing time series data by country for estimated under-5, infant, and neonatal mortality rates.

# Usage

```
data(childMortality)
```

#### Format

A data frame with 28982 rows and 6 variables:

countryISO two-letter country code countryName full name of country continent name of continent category type of mortality rate - infant\_MR, child\_MR, or under5\_MR year year of estimate

estimate estimated mortality rate

# Source

https://childmortality.org

# Examples

str(childMortality)

gss14

### Description

A data set containing data on work, salary, and education from the 2014 General Social Survey. Missing data are explicitly identified with NAs and all data are represented as factors when appropriate.

#### Usage

data(gss14)

#### Format

A data frame with 2538 rows and 19 variables:

YEAR GSS year for this respondent **INCOME06** Total family income (2006 version) **INCOM16** Rs family income when 16 yrs old **REG16** Region of residence, age 16 **RACE** Race of respondent SEX Respondents sex SPDEG Spouses highest degree MADEG Mothers highest degree PADEG Fathers highest degree DEGREE Rs highest degree **CHILDS** Number of children SPWRKSLF Spouse self-emp. or works for somebody SPHRS1 Number of hrs spouse worked last week MARITAL Marital status WRKSLF R self-emp or works for somebody HRS1 Number of hours worked last week WRKSTAT Labor force status **ID**\_ Respondent id number

BALLOT Ballot used for interview

# Source

https://gssdataexplorer.norc.org

#### gss14\_simple

## Examples

str(gss14)
head(gss14)

gss14\_simple

2014 General Social Survey (Simplified)

# Description

A data set containing data on work, salary, and education from the 2014 General Social Survey. Missing data are not explicitly identified with NAs and all data are represented numerically instead of as factors when appropriate.

## Usage

data(gss14\_simple)

#### Format

A data frame with 2538 rows and 19 variables:

YEAR GSS year for this respondent

**INCOME06** Total family income (2006 version)

INCOM16 Rs family income when 16 yrs old

**REG16** Region of residence, age 16

RACE Race of respondent

SEX Respondents sex

SPDEG Spouses highest degree

MADEG Mothers highest degree

PADEG Fathers highest degree

**DEGREE** Rs highest degree

CHILDS Number of children

SPWRKSLF Spouse self-emp. or works for somebody

SPHRS1 Number of hrs spouse worked last week

MARITAL Marital status

WRKSLF R self-emp or works for somebody

HRS1 Number of hours worked last week

WRKSTAT Labor force status

**ID**\_ Respondent id number

BALLOT Ballot used for interview

kerrich

# Source

https://gssdataexplorer.norc.org

#### Examples

str(gss14\_simple)
head(gss14\_simple)

kerrich

Kerrich Coin Toss Trial Outcomes

# Description

A data set containing 2,000 trials of coin flips from statistician John Edmund Kerrich's 1940s experiments while imprisoned by the Nazis during World War Two.

#### Usage

data(kerrich)

#### Format

A data frame with 1216 rows and 21 variables:

id trial

**outcome** outcome of each trial; TRUE = heads, FALSE = tails **average** cumulative mean of outcomes

## Source

https://stats.stackexchange.com/questions/76663/john-kerrich-coin-flip-data/77044#77044 https://books.google.com/books/about/An\_experimental\_introduction\_to\_the\_theo.html?id=JBTvAAAAMAAJ&hl=en

## References

https://en.wikipedia.org/wiki/John\_Edmund\_Kerrich

#### Examples

```
str(kerrich)
```

```
if (require("ggplot2")) {
   ggplot(data = kerrich) +
      geom_hline(mapping = aes(yintercept = .5, color = "p(heads)")) +
      geom_line(mapping = aes(x = id, y = average)) +
      ylim(0,1)
}
```

6

# Index

\* datasets auto17, 2 childMortality, 3 gss14, 4 gss14\_simple, 5 kerrich, 6 auto17, 2

 ${\tt childMortality, 3}$ 

gss14,4 gss14\_simple,5

kerrich,6