Externe Daten

A. Paul

September 2017

External Dataset

The statistics about the accidents are collected and published by the *US National Highway Traffic Safety Administration's Fatality Analysis Reporting System (NHTSF)*, which is a nationwide census providing the American public yearly data regarding fatal injuries suffered in motor vehicle traffic crashes.

More information and the data files can be found on the website

@source https://www.nhtsa.gov/Data/Fatality-Analysis-Reporting-System-(FARS).

There are three data file ('accident_2013', 'accident_2014' and 'accident_2015') in the directory ~/inst/extdata.

They are used for tests, for examples and for show how to work with an dataset.

@Format

The fields of the csv files are shown here.

```
df <- fars_read( filename = "accident_2015.csv.bz2" )
str(df)
```

```
## Classes 'tbl_df', 'tbl' and 'data.frame':    32166 obs. of  52 variables:
##  $ STATE     : int  1 1 1 1 1 1 1 1 1 1 ...
##  $ ST_CASE   : int  10001 10002 10003 10004 10005 10006 10007 10008 10009 10010 ...
##  $ VE_TOTAL  : int  1 1 1 1 2 1 1 1 1 2 ...
##  $ VE_FORMS  : int  1 1 1 1 2 1 1 1 1 2 ...
##  $ PVH_INVL  : int  0 0 0 0 0 0 0 0 0 0 ...
##  $ PEDS      : int  0 0 0 0 0 0 0 1 0 0 ...
##  $ PERNOTMVIT: int  0 0 0 0 0 0 0 1 0 0 ...
##  $ PERMVIT   : int  1 1 2 1 2 2 2 1 1 2 ...
##  $ PERSONS   : int  1 1 2 1 2 2 2 1 1 2 ...
##  $ COUNTY    : int  127 83 11 45 45 111 89 73 117 33 ...
##  $ CITY      : int  0 0 0 0 2050 0 1730 350 47 0 ...
##  $ DAY       : int  1 1 1 4 7 8 8 3 13 5 ...
##  $ MONTH     : int  1 1 1 1 1 1 1 1 1 1 ...
##  $ YEAR      : int  2015 2015 2015 2015 2015 2015 2015 2015 2015 2015 ...
##  $ DAY_WEEK  : int  5 5 5 1 4 5 5 7 3 2 ...
##  $ HOUR      : int  2 22 1 0 7 9 18 21 8 18 ...
##  $ MINUTE    : int  40 13 25 57 9 59 33 30 0 45 ...
##  $ NHS       : int  0 1 0 0 0 0 1 0 1 0 ...
##  $ RUR_URB   : int  1 1 1 1 2 1 2 2 2 1 ...
##  $ FUNC_SYS  : int  3 1 3 4 3 5 3 5 3 4 ...
##  $ RD_OWNER  : int  1 1 1 1 1 2 1 4 1 1 ...
##  $ ROUTE     : int  3 1 2 3 2 4 2 6 2 3 ...
##  $ TWAY_ID   : chr  "SR-5" "I-65" "US-SR 6" "SR-27" ...
##  $ TWAY_ID2  : chr  NA NA NA NA ...
##  $ MILEPT    : int  1754 3604 1958 566 308 0 1030 0 2520 34 ...
##  $ LATITUDE  : num  33.9 34.9 32.1 31.4 31.3 ...
```

```
##  $ LONGITUD  : num  -87.3 -86.9 -85.8 -85.5 -85.5 ...
##  $ SP_JUR    : int  0 0 0 0 0 0 0 0 0 0 ...
##  $ HARM_EV   : int  35 34 42 53 12 1 43 8 23 12 ...
##  $ MAN_COLL  : int  0 0 0 0 6 0 0 0 0 2 ...
##  $ RELJCT1   : int  0 0 0 0 0 0 0 0 0 0 ...
##  $ RELJCT2   : int  1 1 1 1 2 1 1 1 1 1 ...
##  $ TYP_INT   : int  1 1 1 1 3 1 1 1 1 1 ...
##  $ WRK_ZONE  : int  0 0 0 0 0 0 0 0 0 0 ...
##  $ REL_ROAD  : int  4 3 4 4 1 4 4 1 4 1 ...
##  $ LGT_COND  : int  2 2 2 2 1 1 3 2 1 2 ...
##  $ WEATHER1  : int  1 10 1 10 1 1 1 2 10 1 ...
##  $ WEATHER2  : int  0 0 0 0 0 0 0 0 0 0 ...
##  $ WEATHER   : int  1 10 1 10 1 1 1 2 10 1 ...
##  $ SCH_BUS   : int  0 0 0 0 0 0 0 0 0 0 ...
##  $ RAIL      : chr  "0000000" "0000000" "0000000" "0000000" ...
##  $ NOT_HOUR  : int  99 99 99 99 99 99 99 99 99 99 ...
##  $ NOT_MIN   : int  99 99 99 99 99 99 99 99 99 99 ...
##  $ ARR_HOUR  : int  2 22 1 1 7 10 18 21 8 19 ...
##  $ ARR_MIN   : int  58 20 45 15 16 17 38 48 3 1 ...
##  $ HOSP_HR   : int  88 88 99 88 88 99 99 99 88 99 ...
##  $ HOSP_MN   : int  88 88 99 88 88 99 99 99 88 99 ...
##  $ CF1       : int  0 0 0 0 0 0 0 0 0 0 ...
##  $ CF2       : int  0 0 0 0 0 0 0 0 0 0 ...
##  $ CF3       : int  0 0 0 0 0 0 0 0 0 0 ...
##  $ FATALS    : int  1 1 1 1 1 1 1 1 1 1 ...
##  $ DRUNK_DR  : int  1 0 1 1 0 0 0 0 0 0 ...
##  - attr(*, "spec")=List of 2
##   ..$ cols   :List of 52
##   .. ..$ STATE     : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ ST_CASE   : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ VE_TOTAL  : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ VE_FORMS  : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ PVH_INVL  : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ PEDS      : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ PERNOTMVIT: list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ PERMVIT   : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ PERSONS   : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ COUNTY    : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ CITY      : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ DAY       : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ MONTH     : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
```

```
##   .. ..$ YEAR      : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ DAY_WEEK  : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ HOUR      : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ MINUTE    : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ NHS       : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ RUR_URB   : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ FUNC_SYS  : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ RD_OWNER  : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ ROUTE     : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ TWAY_ID   : list()
##   .. .. ..- attr(*, "class")= chr  "collector_character" "collector"
##   .. ..$ TWAY_ID2  : list()
##   .. .. ..- attr(*, "class")= chr  "collector_character" "collector"
##   .. ..$ MILEPT    : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ LATITUDE  : list()
##   .. .. ..- attr(*, "class")= chr  "collector_double" "collector"
##   .. ..$ LONGITUD  : list()
##   .. .. ..- attr(*, "class")= chr  "collector_double" "collector"
##   .. ..$ SP_JUR    : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ HARM_EV   : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ MAN_COLL  : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ RELJCT1   : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ RELJCT2   : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ TYP_INT   : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ WRK_ZONE  : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ REL_ROAD  : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ LGT_COND  : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ WEATHER1  : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ WEATHER2  : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ WEATHER   : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ SCH_BUS   : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
```

```
##   .. ..$ RAIL      : list()
##   .. .. ..- attr(*, "class")= chr  "collector_character" "collector"
##   .. ..$ NOT_HOUR  : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ NOT_MIN   : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ ARR_HOUR  : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ ARR_MIN   : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ HOSP_HR   : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ HOSP_MN   : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ CF1       : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ CF2       : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ CF3       : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ FATALS    : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   .. ..$ DRUNK_DR  : list()
##   .. .. ..- attr(*, "class")= chr  "collector_integer" "collector"
##   ..$ default: list()
##   .. ..- attr(*, "class")= chr  "collector_guess" "collector"
##   ..- attr(*, "class")= chr "col_spec"
```

Example

Let's have a look at an output of the first 10 table entries for some fields.

```
knitr::kable( head(df, 10) )
```

STATE	ST_CASE	VE_TOTAL	VE_FORMS	PVH_INVL	PEDS	PERNOTMVIT	PERMVIT	PERSONS
1	10001	1	1	0	0	0	1	1
1	10002	1	1	0	0	0	1	1
1	10003	1	1	0	0	0	2	2
1	10004	1	1	0	0	0	1	1
1	10005	2	2	0	0	0	2	2
1	10006	1	1	0	0	0	2	2
1	10007	1	1	0	0	0	2	2
1	10008	1	1	0	1	1	1	1
1	10009	1	1	0	0	0	1	1
1	10010	2	2	0	0	0	2	2