Package 'NDS'

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Type Package

Title An R package for manipulating Naturalistic Driving Datasets (NDS).

Version 0.1.0

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Description An R package for manipulating Naturalistic Driving Datasets (NDS).

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Encoding UTF-8

LazyData true

RoxygenNote 6.1.1

Suggests knitr, rmarkdown

VignetteBuilder knitr

Imports data.table, magrittr

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R topics documented:

`NDS-package` *NDS: a toolkit for handling NDS datasets.*

Description

NDS provides high-performance data separation, aggregation, reorganize, and fuzzy joining toolkits to handle high-resolution naturalistic driving datasets.

Details

- Aggregate large real-time ping data to trips or shifts.
- Separate trips or shifts to equal-length time intervals.
- Merge Safety Critical-Events with trips, shifts, and time intervals.

To learn more about NDS, you can start with the vignettes: ‘browseVignettes(package = "NDS")‘

Author(s)

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`agg_trip` *aggregate NDS ping data to shift or trips new datasets.*

Description

This function produce new datasets with starting and ending variables, which may include date and time, latitude, longitude.

Usage

```
agg_trip(data, trip_id)
```

Arguments

`data`	The data to be passed on.
`trip_id`	The ID column generated by the ‘segment()‘ function.
`threhold`	The threshold you want to separate the ping (in minutes). It is recommended to use 30 minutes to separate into trips, and 8*60 minutes to separate into shifts.
`time_diff`	The time difference between the nearest two pings.

Examples

```
`agg_trip(data = dat, trip_id = id)`
```

`segment` *‘segment‘ NDS ping data by adding a trip or shift ID column.*

Description

This function segments NDS ping data to shifts and trips

Usage

```
segment(speed, threshold, time_diff)
```

Arguments

speed	Real time speed of the ping
time_diff	The time difference between the nearest two pings.
threhold	The threshold you want to separate the ping (in minutes). It is recommended to use 30 minutes to separate into trips, and 8*60 minutes to separate into shifts.

Examples

```
`segment(dat$speed, 30, d$time_diff)`
```

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