## Package 'tcxr'

March 12, 2025

Title Parse and Analyze TCX Files

Version 0.1.0

**Description** Framework provides functions to parse 'Training Center XML (TCX)' files and extract key activity metrics such as total distance, total time, calories burned, maximum altitude, and power values (watts). This package is useful for analyzing workout and training data from devices that export 'TCX' format.

**Depends** R (>= 3.5.0)

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Imports XML

Suggests testthat

**Encoding** UTF-8

RoxygenNote 7.2.3

NeedsCompilation no

Author Iztok Jr. Fister [aut, cre, cph] (<https://orcid.org/0000-0002-6418-1272>)

Maintainer Iztok Jr. Fister <iztok@iztok.space>

**Repository** CRAN

Date/Publication 2025-03-12 17:30:02 UTC

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parse\_lap

#### Description

Extracts data from a lap within a TCX file, including time, distance, altitude, speed, power, cadence, and heart rate.

#### Usage

parse\_lap(lap)

#### Arguments

lap

An XML node representing a lap in a TCX file.

#### Value

A dataframe containing the lap metrics.

parse\_trackpoint Parse a Trackpoint from a TCX File

#### Description

Extracts data from a trackpoint, including altitude, distance, speed, power, cadence, and heart rate.

#### Usage

```
parse_trackpoint(trackpoint)
```

#### Arguments

trackpoint An XML node representing a trackpoint.

#### Value

A list of parsed trackpoint metrics.

TCXRead

#### Description

Parses a TCX file to extract key activity metrics such as speed, distance, time, altitude, power, cadence, heart rate, and activity type.

#### Usage

TCXRead(file\_path)

#### Arguments

file\_path A character string specifying the path to the TCX file.

#### Value

A list containing the computed activity metrics, including the activity type.

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