

# Package ‘dtreg’

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**Title** Interact with Data Type Registries and Create Machine-Readable Data

**Version** 1.1.1

**Description** You can load a schema from a DTR (data type registry) as an R object. Use this schema to write your data in JSON-LD (JavaScript Object Notation for Linked Data) format to make it machine readable.

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**URL** <https://gitlab.com/TIBHannover/orkg/dtreg-r>

**BugReports** <https://gitlab.com/TIBHannover/orkg/dtreg-r/-/issues>

**Depends** R (>= 4.1.0)

**Imports** httr2, jsonlite, methods, R6, stringr

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

**VignetteBuilder** knitr

**Config/testthat/edition** 3

**Encoding** UTF-8

**RoxygenNote** 7.2.3

**NeedsCompilation** no

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**Repository** CRAN

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|---------------|------------------------------------------------------------|
| load_datatype | <i>Load classes for a schema with the known identifier</i> |
|---------------|------------------------------------------------------------|

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**Description**

Load a list of R6 classes for a schema identifier, such as an ePIC datatype DOI or an ORKG template URL. The classes contain information of the requested schema and nested schemata.

**Usage**

```
load_datatype(datatype_id)
```

**Arguments**

|             |                                             |
|-------------|---------------------------------------------|
| datatype_id | A schema identifier, such as a DOI or a URL |
|-------------|---------------------------------------------|

**Value**

A list of R6 classes

**Examples**

```
dt <- dtreg::load_datatype("https://doi.org/21.T11969/aff130c76e68ead3862e")
```

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|             |                           |
|-------------|---------------------------|
| show_fields | <i>Show schema fields</i> |
|-------------|---------------------------|

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**Description**

Show which fields of a schema can be used for creating an instance

**Usage**

```
show_fields(datatype)
```

**Arguments**

|          |                                       |
|----------|---------------------------------------|
| datatype | An R6 class from dtreg::load_datatype |
|----------|---------------------------------------|

**Value**

A character vector of available fields

**Examples**

```
dt <- dtreg::load_datatype("https://doi.org/21.T11969/aff130c76e68ead3862e")
dtreg::show_fields(dt$data_item())
```

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**to\_jsonld***Write an instance in JSON-LD format*

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**Description**

Write an instance of a schema-related class in JSON-LD format as a string

**Usage**

```
to_jsonld(instance)
```

**Arguments**

instance      An instance of an R6 class

**Value**

JSON string in JSON-LD format

**Examples**

```
dt <- dtreg::load_datatype("https://doi.org/21.T11969/aff130c76e68ead3862e")
instance <- dt$data_item(label = "my_results")
result <- dtreg::to_jsonld(instance)
```

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