

Package ‘SigOptR’

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Title R API Wrapper for SigOpt

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Description Interfaces with the 'SigOpt' API. More info at <<https://sigopt.com>>.

Imports httr, jsonlite

Depends R (>= 3.2.0)

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create_experiment *Create an experiment*

Description

Create an experiment

Usage

```
create_experiment(body)
```

Arguments

body POST body of create request

Value

experiment created by SigOpt

Examples

```
env <- Sys.getenv("NOT_CRAN")
if (!identical(env, "true")) {
  0
} else {
  create_experiment(list(
    name="R test experiment",
    parameters=list(
      list(name="x1", type="double", bounds=list(min=0, max=100)),
      list(name="x2", type="double", bounds=list(min=0, max=100))
    )
  ))
}
```

create_observation *Create an observation for an experiment*

Description

Create an observation for an experiment

Usage

```
create_observation(experiment_id, body)
```

Arguments

experiment_id the id of an experiment to create an observation for
body POST body of create request

Value

observation created by SigOpt

Examples

```
env <- Sys.getenv("NOT_CRAN")
if (!identical(env, "true")) {
  0
} else {
  experiment <- create_experiment(list(
    name="R test experiment",
    parameters=list(
      list(name="x1", type="double", bounds=list(min=0, max=100)),
      list(name="x2", type="double", bounds=list(min=0, max=100))
    )
  ))
  suggestion <- create_suggestion(experiment$id)
  create_observation(experiment$id, list(suggestion=suggestion$id, value=99.08))
  create_observation(experiment$id, list(suggestion=suggestion$id, value=99.58, value_stddev=0.1))}
```

create_suggestion	<i>Create a suggestion for an experiment</i>
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Description

Create a suggestion for an experiment

Usage

```
create_suggestion(experiment_id, body = NULL)
```

Arguments

experiment_id the id of an experiment to create an suggestion for
body POST body of create request

Value

suggestion created by SigOpt

Examples

```
env <- Sys.getenv("NOT_CRAN")
if (!identical(env, "true")) {
  0
} else {
  experiment <- create_experiment(list(
    name="R test experiment",
    parameters=list(
```

```
    list(name="x1", type="double", bounds=list(min=0, max=100)),
    list(name="x2", type="double", bounds=list(min=0, max=100))
  )
})
create_suggestion(experiment$id)}
```

fetch_experiment	<i>Fetch an experiment</i>
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Description

Fetch an experiment

Usage

```
fetch_experiment(experiment_id, body = NULL)
```

Arguments

experiment_id the id of an experiment to fetch
body Url params of GET request

Value

SigOpt experiment with id experiment_id

Examples

```
env <- Sys.getenv("NOT_CRAN")
if (!identical(env, "true")) {
  0
} else {
  experiment <- create_experiment(list(
    name="R test experiment",
    parameters=list(
      list(name="x1", type="double", bounds=list(min=0, max=100)),
      list(name="x2", type="double", bounds=list(min=0, max=100))
    )
  ))
  fetch_experiment(experiment$id)}
```

franke	<i>Franke function - http://www.sfu.ca/~ssurjano/franke2d.html</i>
--------	--

Description

Franke function - <http://www.sfu.ca/~ssurjano/franke2d.html>

Usage

```
franke(x, y)
```

Arguments

x	First dimension
y	Second dimension

Value

The franke function evaluated at x,y

Examples

```
franke(0,1)
```

sigopt_api_token	<i>Get the SigOpt API token from the SIGOPT_API_TOKEN environment variable or user input</i>
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Description

Get the SigOpt API token from the SIGOPT_API_TOKEN environment variable or user input

Usage

```
sigopt_api_token(force = FALSE)
```

Arguments

force	force entry of SigOpt API token, even if present
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Value

SigOpt API token

sigopt_api_url *Get the SigOpt API url from the SIGOPT_API_URL environment variable or use default Most users will be ok with the default value*

Description

Get the SigOpt API url from the SIGOPT_API_URL environment variable or use default Most users will be ok with the default value

Usage

```
sigopt_api_url()
```

Value

Base url for SigOpt API requests

See Also

[sigopt_GET](#) and [sigopt_POST](#), which perform the HTTP requests

sigopt_api_user_agent *User agent for current version of SigOpt R API Client*

Description

User agent for current version of SigOpt R API Client

Usage

```
sigopt_api_user_agent()
```

Value

User agent

See Also

[sigopt_GET](#) and [sigopt_POST](#), which perform the HTTP requests

sigopt_auth	<i>Create authentication for SigOpt API, using HTTP Basic Auth</i>
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Description

Create authentication for SigOpt API, using HTTP Basic Auth

Usage

```
sigopt_auth(api_token = sigopt_api_token())
```

Arguments

api_token SigOpt API token

Value

http basic authentication with api_token as username and no password

sigopt_check	<i>Check content returned by the SigOpt API</i>
--------------	---

Description

Check content returned by the SigOpt API

Usage

```
sigopt_check(req)
```

Arguments

req result of request to the SigOpt API

Value

invisible(), stops if there is an error status code

See Also

[sigopt_GET](#) and [sigopt_POST](#), which call this function interally

sigopt_GET	<i>GET request to SigOpt API path, with json encoded body</i>
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Description

GET request to SigOpt API path, with json encoded body

Usage

```
sigopt_GET(path, query = NULL, api_token = sigopt_api_token())
```

Arguments

path	path of SigOpt API url to POST to
query	list of query parameters to be url-encoded
api_token	SigOpt api token

Value

result of request to SigOpt API, needs to be JSON decoded

See Also

[sigopt_parse](#), which parses the result of this function

sigopt_parse	<i>Parse content returned by the SigOpt API</i>
--------------	---

Description

Parse content returned by the SigOpt API

Usage

```
sigopt_parse(req)
```

Arguments

req	result of request to the SigOpt API
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Value

json decoding of request object

See Also

[sigopt_GET](#) and [sigopt_POST](#), which call this function interally

`sigopt_POST`*POST request to SigOpt API path, with json encoded body*

Description

POST request to SigOpt API path, with json encoded body

Usage

```
sigopt_POST(path, body, api_token = sigopt_api_token())
```

Arguments

<code>path</code>	path of SigOpt API url to POST to
<code>body</code>	POST body, will be json-encoded
<code>api_token</code>	SigOpt api token

Value

result of request to SigOpt API, needs to be JSON decoded

See Also

[sigopt_parse](#), which parses the result of this function

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