

# Package ‘validmind’

April 8, 2024

**Type** Package

**Title** Interface to the 'ValidMind' Platform

**Version** 0.1.1

**Maintainer** Andres Rodriguez <andres@validmind.ai>

**Description** Deploy, execute, and analyze the results of models hosted on the 'ValidMind' platform <<https://validmind.com>>. This package interfaces with the 'Python' client library in order to allow advanced diagnostics and insight into trained models all from an 'R' environment.

**License** AGPL-3

**Encoding** UTF-8

**URL** <https://github.com/validmind/developer-framework>

**BugReports** <https://github.com/validmind/developer-framework/issues>

**RoxygenNote** 7.3.1

**Imports** glue, reticulate, dplyr, plotly, htmltools, rmarkdown, DT, base64enc

**NeedsCompilation** no

**Author** Andres Rodriguez [aut, cre, cph]

**Repository** CRAN

**Date/Publication** 2024-04-08 14:50:02 UTC

## R topics documented:

build_r_plotly . . . . .	2
display_report . . . . .	2
print_summary_tables . . . . .	3
process_result . . . . .	4
summarize_metric_result . . . . .	4
summarize_result . . . . .	5
summarize_test_result . . . . .	5
vm . . . . .	6

<b>Index</b>	<b>7</b>
--------------	----------

---

build_r_plotly	<i>Build an R Plotly figure from a JSON representation</i>
----------------	--

---

**Description**

Build an R Plotly figure from a JSON representation

**Usage**

```
build_r_plotly(plotly_figure)
```

**Arguments**

plotly\_figure A nested list containing plotly elements

**Value**

An R Plotly object derived from the JSON representation

---

display_report	<i>Produce RMarkdown-compatible output of all results</i>
----------------	---

---

**Description**

Produce RMarkdown-compatible output of all results

**Usage**

```
display_report(processed_results)
```

**Arguments**

processed\_results  
A list of processed result objects

**Value**

A formatted list of RMarkdown widgets

**Examples**

```
## Not run:
vm_dataset = vm_r$init_dataset(
  dataset=data,
  target_column="Exited",
  class_labels=list("0" = "Did not exit", "1" = "Exited")
)

tabular_suite_results <- vm_r$run_test_suite("tabular_dataset", dataset=vm_dataset)

processed_results <- process_result(tabular_suite_results)
all_widgets <- display_report(processed_results)
for (widget in all_widgets) {
  print(widget)
}

## End(Not run)
```

---

```
print_summary_tables Print a summary table of the ValidMind results
```

---

**Description**

Print a summary table of the ValidMind results

**Usage**

```
print_summary_tables(result_summary)
```

**Arguments**

result\_summary A summary of the results

**Value**

A data frame containing the summary of the ValidMind results

---

process\_result            *Process a set of ValidMind results into parseable data*

---

**Description**

Process a set of ValidMind results into parseable data

**Usage**

```
process_result(results)
```

**Arguments**

results            A list of ValidMind result objects

**Value**

A nested list of ValidMind results (dataframes, plotly plots, and matplotlib plots)

**Examples**

```
## Not run:
vm_dataset = vm_r$init_dataset(
  dataset=data,
  target_column="Exited",
  class_labels=list("0" = "Did not exit", "1" = "Exited")
)

tabular_suite_results <- vm_r$run_test_suite("tabular_dataset", dataset=vm_dataset)

processed_results <- process_result(tabular_suite_results)
processed_results

## End(Not run)
```

---

summarize\_metric\_result  
*Provide a summarization of a single metric result*

---

**Description**

Provide a summarization of a single metric result

**Usage**

```
summarize_metric_result(result)
```

**Arguments**

result            The ValidMind result object

**Value**

A list containing the summary of the ValidMind results

---

summarize\_result        *Provide a summarization of a single result (test or metric)*

---

**Description**

Provide a summarization of a single result (test or metric)

**Usage**

summarize\_result(result)

**Arguments**

result            The ValidMind result object

**Value**

Based on the type of 'result', either A list containing the summary of the ValidMind results, or a list containing the summary of the ValidMind results

---

summarize\_test\_result    *Provide a summarization of a single test result*

---

**Description**

Provide a summarization of a single test result

**Usage**

summarize\_test\_result(result)

**Arguments**

result            The ValidMind result object

**Value**

A list containing the summary of the ValidMind test results

---

`vm`*Retrieve a validmind (vm) connection object using reticulate*

---

## Description

Retrieve a validmind (vm) connection object using reticulate

## Usage

```
vm(  
  api_key,  
  api_secret,  
  project,  
  python_version,  
  api_host = "http://localhost:3000/api/v1/tracking"  
)
```

## Arguments

<code>api_key</code>	The ValidMind API key
<code>api_secret</code>	The ValidMind API secret
<code>project</code>	The ValidMind project
<code>python_version</code>	The Python Version to use
<code>api_host</code>	The ValidMind host, defaulting to local

## Value

A validmind connection object, obtained from 'reticulate', which orchestrates the connection to the ValidMind API

## Examples

```
## Not run:  
vm_r <- vm(  
  api_key="<your_api_key_here>",  
  api_secret="<your_api_secret_here>",  
  project="<your_project_id_here>",  
  python_version=python_version,  
  api_host="https://api.dev.vm.validmind.ai/api/v1/tracking"  
)  
  
## End(Not run)
```

# Index

`build_r_plotly`, [2](#)

`display_report`, [2](#)

`print_summary_tables`, [3](#)

`process_result`, [4](#)

`summarize_metric_result`, [4](#)

`summarize_result`, [5](#)

`summarize_test_result`, [5](#)

`vm`, [6](#)