# Package 'fastrerandomize'

September 20, 2023
Title fastrerandomize: R Package for Ultra Fast Re-randomization Using a JAX Backend
Version 0.1
Authors 'Connor Jerzak <a href="mailto:com">com</a> [aut, cre], Rebecca Gold-stein <a href="mailto:com">crgoldstein@berkeley.edu</a> [aut]'
Description An R Package for Ultra Fast Re-randomization Using a JAX Backend
<b>Depends</b> R (>= $3.3.3$ )
License  Creative Commons Attribution-Noncommercial-No Derivative Works 4.0, for academic use only
Encoding UTF-8
LazyData false
Maintainer 'Connor Jerzak' <connor.jerzak@gmail.com></connor.jerzak@gmail.com>
Imports reticulate
RoxygenNote 7.2.3
R topics documented:  generate_data InitializeJax InitializeJAXFxns randomization_test
Index
generate_data Generate data
Description
Generate data
Usage
<pre>generate_data()</pre>

2 InitializeJax

#### Value

A list consiting of

• pval A p-value.

#### References

•

# **Examples**

```
# For a tutorial, see
# github.com/cjerzak/fastrerandomization
```

InitializeJax

Initialize JAX

# Description

Initialize JAX

# Usage

InitializeJax()

#### Value

A list consiting of

• pval A p-value.

#### References

•

# **Examples**

```
# For a tutorial, see
```

# github.com/cjerzak/fastrerandomization

InitializeJAXFxns 3

InitializeJAXFxns

Initialize JAX

# Description

Initialize JAX

#### Usage

InitializeJAXFxns()

#### Value

A list consiting of

•

#### References

•

#### **Examples**

```
# For tutorials, see
# github.com/cjerzak/fastrerandomization-software
```

 $randomization\_test$ 

Fast randomization test

# Description

Fast randomization test

#### Usage

```
randomization\_test(X, ...)
```

#### Arguments

obsW A numeric vector where 0's correspond to control units and 1's to treated units.

obsY A numeric vector containing observed outcomes.

#### Value

A list consiting of

• pval A p-value.

### References

•

4 randomization\_test

# Examples

- # For a tutorial, see
- $\begin{tabular}{ll} \# \ github.com/cjerzak/fastrerandomization \end{tabular}$

# Index

```
generate_data, 1
InitializeJax, 2
InitializeJAXFxns, 3
randomization_test, 3
```