Package 'optimalcausalities'

March 10, 2021

Title Optimal Stochastic Interventions in High-dimensional Data

Version 2.0

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Description Description here.

Depends R (>= 3.3.3)

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Encoding UTF-8

LazyData true

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Imports Rsolnp, keyATM

RoxygenNote 7.1.1

R topics documented:

`computeQse_conjoint` *computeQse_conjoint*

Description

Implements ...

Usage

```
computeQse_conjoint(theta, FactorMatrix, log_pr_w = NULL)
```

Arguments

dfm	'document-feature matrix'. A list ...

Value

A list consiting of

- Items.

References

- Kosuke, Rohit, Connor. Working Paper.

Examples

```
#set seed
set.seed(1)

#Geneate data
x <- rnorm(100)
```

---

computeQse_lda *computeQse_lda*

Description

Implements ...

Usage

```
computeQse_lda(
  THETA__,
  INDICES_,
  DOC_INDICES_U,
  D_INDICES_U,
  PI_MAT_INPUT,
  MARGINAL_BOUNDS,
  DOC_LIST,
  MODAL_DOC_LEN,
  TERMS_MAT_INPUT,
  LOG_TREATCOMBS,
  YOBS,
  log = T,
  LOG_PR_W = NULL
)
```

Arguments

dfm 'document-feature matrix'. A list ...

Value

A list consiting of

- Items.

References

- Kosuke, Rohit, Connor. Working Paper.

Examples

```
#set seed
set.seed(1)

#Geneate data
x <- rnorm(100)
```

---

computeQ_conjoint *computeQ_conjoint*

Description

Implements ...

Usage

```
computeQ_conjoint(theta, FactorsMat, Yobs, log_pr_w = NULL)
```

Arguments

dfm 'document-feature matrix'. A list ...

Value

A list consiting of

- Items.

References

- Kosuke, Rohit, Connor. Working Paper.

Examples

```
#set seed
set.seed(1)

#Geneate data
x <- rnorm(100)
```

computeQ_lda *computeQ_lda*

Description

Implements ...

Usage

```
computeQ_lda(
  theta = NULL,
  term_mat,
  Yobs,
  doc_words,
  dtm = NULL,
  pi_mat = NULL,
  alpha_mat = NULL,
  log_pr_w = NULL,
  computeSE = F,
  trim_q = 1,
  quiet = T,
  iters = 100,
  smoothWts = F,
  TreatFxn = NULL,
  maxWt = 1e+10,
  maxWt_hajek = NULL,
  term_mat_TRUE = NULL,
  doc_indices_u = NULL,
  d_indices_u = NULL,
  diagnostics = F
)
```

Arguments

dfm	'document-feature matrix'. A list ...

Value

A list consiting of

- Items.

References

- Kosuke, Rohit, Connor. Working Paper.

Examples

```
#set seed
set.seed(1)

#Geneate data
```

```
x <- rnorm(100)
```

`optimizecausalities` *optimizecausalities*

Description

Implements ...

Usage

```
optimizecausalities(Yobs, W, optimize = T, theta = NULL)
```

Arguments

`dfm`	'document-feature matrix'. A list ...

Value

A list consiting of

- Items.

References

- Kosuke Imai, Rohit, Connor

Examples

```
#set seed
set.seed(1)

#Geneate data
x <- rnorm(100)
```

`optimizeQ_conjoint` *computeQ_conjoint*

Description

Implements ...

Usage

```
optimizeQ_conjoint(FactorMatrix, SE_bound)
```

Arguments

`dfm`	'document-feature matrix'. A list ...

Value

A list consiting of

- Items.

References

- Kosuke Imai, Rohit, Connor

Examples

```
#set seed
set.seed(1)

#Geneate data
x <- rnorm(100)
```

`optimizeQ_lda` *computeQ_lda*

Description

Implements ...

Usage

```
optimizeQ_lda(
  DATA_SPLIT1,
  DATA_SPLIT2 = NULL,
  DTM_MAT,
  n_fold = 3,
  YOBS,
  PI_MAT,
  DOC_LIST,
  TERMS_MAT,
  SE_UB = sd(YOBS)/10,
  nboot = 10,
  trim_q = 1,
  maxWt = 1e+10,
  maxWt_hajek = NULL,
  computeSEs = T,
  doMax = T,
  alphaLevel = 0.05
)
```

Arguments

`dfm`	'document-feature matrix'. A list ...

Value

A list consiting of

- Items.

References

- Kosuke Imai, Rohit, Connor

Examples

```
#set seed
set.seed(1)

#Geneate data
x <- rnorm(100)
```

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