Package ‘Sojourn.Data’

May 3, 2019

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**Description**

Uniaxial neural network for use in original triaxial Sojourn method

**Usage**

```
ALL.reg.nn
```

**Format**

From `print(ALL.reg.nn)`:

- A 6-25-1 network with 207 weights
- Inputs: X10. X25. X50. X75. X90. acf
- Output(s): oxy.METS.calculated options were - skip-layer connections linear output units

---

**Description**

Centering coefficients for uniaxial nnetinputs

**Usage**

```
cent
```

**Format**

A named numeric vector
Centering coefficients for triaxial nnetinputs

Description

Centering coefficients for triaxial nnetinputs

Usage

cent.1

Format

A named numeric vector

class.nnn.6

Triaxial neural network for original Sojourn method

Description

Triaxial neural network for original Sojourn method

Usage

class.nnn.6

Format

From print(class.nnn.6):
a 22-25-4 network with 767 weights inputs: X50. X75. X90. acf X10.2 X25.2 X50.2 X75.2 X90.2 acf.2 X25.3 X50.3 X75.3 X90.3 acf.3 X10.vm X25.vm X50.vm X75.vm X90.vm acf.vm inact.durations output(s): train.6$act.type options were - skip-layer connections softmax modelling decay=0.03
**Description**

Uniaxial neural network for use in the original uniaxial Sojourn method

**Usage**

reg.nn

**Format**

From print(reg.nn): a 6-25-1 network with 207 weights inputs: X10. X25. X50. X75. X90. acf output(s): oxy.METS.calculated options were - skip-layer connections linear output units

---

**Description**

Scaling coefficients for uniaxial nnetinputs

**Usage**

scal

**Format**

numeric vector of size 6

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**Description**

Scaling coefficients for triaxial nnetinputs

**Usage**

scal.1

**Format**

numeric vector of size 25
Sojourn.Data: Models for Sojourn Accelerometer Methods

Description

Sojourn methods rely on large objects, which take up too much space in an ordinary package. Thus, the objects are stored in this data-only package, meant to complement the Sojourn package.

youth_grids

Data frame containing grid values for the youth Sojourn method

Description

Data frame containing grid values for the youth Sojourn method

Usage

youth_grids

Format

data frame with 4 rows and 14 columns

youth_hipCounts

Neural network for youth Sojourn method, taking activity count data from hip-worn monitors

Description

Neural network for youth Sojourn method, taking activity count data from hip-worn monitors

Usage

youth_hipCounts

Format

From print(youth_hipCounts):
a 9-15-3 network with 198 weights inputs: Age SexM BMI VM_Q10 VM_Q25 VM_Q50 VM_Q75 VM_Q90 VM_lag1 output(s): .outcome options were - softmax modelling
youth_hipRaw  *Neural network for youth Sojourn method, taking raw accelerometer data from hip-worn monitors*

**Description**

Neural network for youth Sojourn method, taking raw accelerometer data from hip-worn monitors

**Usage**

`youth_hipRaw`

**Format**

From `print(youth_hipRaw)`:

a 9-20-3 network with 263 weights inputs: Age SexM BMI ENMO_Q10 ENMO_Q25 ENMO_Q50 ENMO_Q75 ENMO_Q90 ENMO_lag1 output(s): .outcome options were - softmax modelling decay=0.1

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youth_wristCounts  *Neural network for youth Sojourn method, taking activity count data from non-dominant-wrist-worn monitors*

**Description**

Neural network for youth Sojourn method, taking activity count data from non-dominant-wrist-worn monitors

**Usage**

`youth_wristCounts`

**Format**

From `print(youth_wristCounts)`:  
a 9-15-3 network with 198 weights inputs: Age SexM BMI VM_Q10 VM_Q25 VM_Q50 VM_Q75 VM_Q90 VM_lag1 output(s): .outcome options were - softmax modelling decay=0.1
Neural network for youth Sojourn method, taking raw accelerometer data from non-dominant-wrist-worn monitors

**Description**

Neural network for youth Sojourn method, taking raw accelerometer data from non-dominant-wrist-worn monitors

**Usage**

`youth_wristRaw`

**Format**

From `print(youth_wristRaw)`: a 9-15-3 network with 198 weights inputs: Age SexM BMI ENMO_Q10 ENMO_Q25 ENMO_Q50 ENMO_Q75 ENMO_Q90 ENMO_lag1 output(s): .outcome options were - softmax modelling decay=0.1
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