

IRLS

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IMPORTS

ML_Core | ML_Core.Types | LogisticRegression | LogisticRegression.Constants |
LogisticRegression.Types | logisticregression.irls |

DESCRIPTIONS

FUNCTION GetModel

<code>DATASET(Layout_Model)</code>	GetModel
<pre>(DATASET(NumericField) independents, DATASET(DiscreteField) dependents, UNSIGNED max_iter=200, REAL8 epsilon=Constants.default_epsilon, REAL8 ridge=Constants.default_ridge)</pre>	

Generate logistic regression model from training data. The size of the inputs is used to determine which work items are processed with purely local operations (the data is moved once as necessary) or with global operations supporting a work item to use multiple nodes.

PARAMETER [independents](#) ||| TABLE (NumericField) — the independent values

PARAMETER [ridge](#) ||| REAL8 — a value to populate a diagonal matrix that is added to a matrix help assure that the matrix is invertible.

PARAMETER [max_iter](#) ||| UNSIGNED8 — maximum number of iterations to try

PARAMETER [dependents](#) ||| TABLE (DiscreteField) — the dependent values.

PARAMETER epsilon ||| REAL8 — the minimum change in the Beta value estimate to continue

RETURN TABLE ({ UNSIGNED2 wi , UNSIGNED8 id , UNSIGNED4 number , REAL8 value }) — coefficient matrix plus model building stats

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IMPORTS

ML_Core | ML_Core.Types | PBblas | PBblas.Types | LogisticRegression |
LogisticRegression.Constants | LogisticRegression.Types |

DESCRIPTIONS

FUNCTION GetModel__global

<code>DATASET(Layout_Model)</code>	GetModel__global
<pre>(DATASET(NumericField) independents, DATASET(DiscreteField) dependents, UNSIGNED max_iter=200, REAL8 epsilon=Constants.default_epsilon, REAL8 ridge=Constants.default_ridge)</pre>	

Internal function to determine values for the model coefficients and selected statistics from building the model.

PARAMETER `independents` ||| TABLE (NumericField) — the independent values

PARAMETER `ridge` ||| REAL8 — a value to pupulate a diagonal matrix that is added to a matrix help assure that the matrix is invertible.

PARAMETER `max_iter` ||| UNSIGNED8 — maximum number of iterations to try

PARAMETER `dependents` ||| TABLE (DiscreteField) — the dependent values

PARAMETER `epsilon` ||| REAL8 — the minimum change in the Beta value estimate to continue

RETURN TABLE ({ UNSIGNED2 wi , UNSIGNED8 id , UNSIGNED4 number , REAL8 value }) — coefficient matrix plus model building statistics

LogisticRegression/ IRLS/ GetModel__local

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IMPORTS

ML_Core | ML_Core.Types | LogisticRegression | LogisticRegression.Constants |
LogisticRegression.Types | LogisticRegression.IRLS | std | std.blas |

DESCRIPTIONS

FUNCTION GetModel__local

<code>DATASET(Layout_Model)</code>	GetModel__local
<pre>(DATASET(NumericField) independents, DATASET(DiscreteField) dependents, UNSIGNED2 max_iter=200, REAL8 epsilon=Constants.default_epsilon, REAL8 ridge=Constants.default_ridge)</pre>	

Internal function to determine values for the model co-efficients and selected stats from building the model.

PARAMETER **independents** ||| TABLE (NumericField) — the independent values

PARAMETER **ridge** ||| REAL8 — a value to populate a diagonal matrix that is added to a matrix help assure that the matrix is invertible.

PARAMETER **max_iter** ||| UNSIGNED2 — maximum number of iterations to try

PARAMETER **dependents** ||| TABLE (DiscreteField) — the dependent values.

PARAMETER **epsilon** ||| REAL8 — the minimum change in the Beta value estimate to continue

RETURN TABLE ({ UNSIGNED2 wi , UNSIGNED8 id , UNSIGNED4 number , REAL8 value }) — coefficient matrix plus model building stats
