

# ML\_Core

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Name	ML_Core
Version	3.1.0
Description	Common definitions for Machine Learning
License	<a href="#">See LICENSE.TXT</a>
Copyright	Copyright (C) 2017 HPCC Systems
Authors	HPCCSystems
Platform	6.2.0

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# ML\_Core/ AppendID

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## DESCRIPTIONS

### **MACRO** AppendID

	AppendID
	(dIn,idfield,dOut)

No Documentation Found

**PARAMETER** din ||| INTEGER8 — No Doc

**PARAMETER** dout ||| INTEGER8 — No Doc

**PARAMETER** idfield ||| INTEGER8 — No Doc

**RETURN** —

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# ML\_Core/ AppendSeqID

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## DESCRIPTIONS

### **MACRO** AppendSeqID

	AppendSeqID
	(dIn,idfield,dOut)

No Documentation Found

**PARAMETER** din ||| INTEGER8 — No Doc

**PARAMETER** dout ||| INTEGER8 — No Doc

**PARAMETER** idfield ||| INTEGER8 — No Doc

**RETURN** —

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# ML\_Core/ Config

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## DESCRIPTIONS

### **MODULE** Config

	Config
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No Documentation Found

#### Children

1. [MaxLookup](#) : No Documentation Found
2. [Discrete](#) : No Documentation Found
3. [RoundingError](#) : No Documentation Found

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### **ATTRIBUTE** MaxLookup

[Config](#) \

	MaxLookup
--	-----------

No Documentation Found

**RETURN** INTEGER8 —

---

## **ATTRIBUTE** Discrete

[Config](#) \

	Discrete
--	----------

No Documentation Found

**RETURN** INTEGER8 —

---

## **ATTRIBUTE** RoundingError

[Config](#) \

	RoundingError
--	---------------

No Documentation Found

**RETURN** REAL8 —

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# ML\_Core/ Constants

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## DESCRIPTIONS

### **MODULE** Constants

	Constants
--	-----------

Useful constants

Children

1. [Pi](#) : Constant PI
2. [Root\\_2](#) : Constant square root of 2

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### **ATTRIBUTE** Pi

[Constants](#) \

	Pi
--	----

Constant PI

**RETURN** REAL8 —

---

## ATTRIBUTE Root\_2

Constants \

Root_2
--------

Constant square root of 2

RETURN REAL8 —

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# ML\_Core/ FieldAggregates

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## IMPORTS

ML\_Core | ML\_Core.Types | ML\_Core.Utils | std.system.ThorLib |

## DESCRIPTIONS

### **MODULE** FieldAggregates

FieldAggregates
(DATASET(Types.NumericField) d)

No Documentation Found

**PARAMETER** d ||| TABLE ( NumericField ) — No Doc

### Children

1. [Simple](#) : No Documentation Found
2. [SimpleRanked](#) : No Documentation Found
3. [Medians](#) : No Documentation Found
4. [MinMedNext](#) : No Documentation Found
5. [Buckets](#) : No Documentation Found
6. [BucketRanges](#) : No Documentation Found



7. [Modes](#) : No Documentation Found
  8. [Cardinality](#) : No Documentation Found
  9. [RankedInput](#) : No Documentation Found
  10. [NTiles](#) : No Documentation Found
  11. [NTileRanges](#) : No Documentation Found
- 

## ATTRIBUTE Simple

[FieldAggregates](#) \

	Simple
--	--------

No Documentation Found

**RETURN** TABLE ( { UNSIGNED2 wi , UNSIGNED4 number , REAL8 minval , REAL8 maxval , REAL8 sumval , REAL8 countval , REAL8 mean , REAL8 var , REAL8 sd } ) —

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## ATTRIBUTE SimpleRanked

[FieldAggregates](#) \

	SimpleRanked
--	--------------

No Documentation Found

**RETURN** TABLE ( { UNSIGNED2 wi , UNSIGNED8 id , UNSIGNED4 number , REAL8 value , UNSIGNED8 Pos } ) —

---

## ATTRIBUTE Medians

[FieldAggregates](#) \

	Medians
--	---------

No Documentation Found

**RETURN** TABLE ( { UNSIGNED2 wi , UNSIGNED4 number , REAL8 median } ) —

---

## ATTRIBUTE MinMedNext

[FieldAggregates](#) \

	MinMedNext
--	------------

No Documentation Found

**RETURN** TABLE ( { UNSIGNED2 wi , UNSIGNED4 number , REAL8 median , REAL8 nextval , REAL8 minval , REAL8 maxval , REAL8 sumval , REAL8 countval , REAL8 mean , REAL8 var , REAL8 sd } ) —

---

## FUNCTION Buckets

[FieldAggregates](#) \

	Buckets
(Types.t_Discrete n)	

No Documentation Found

**PARAMETER** n ||| INTEGER4 — No Doc

**RETURN** TABLE ( { UNSIGNED2 wi , UNSIGNED8 id , UNSIGNED4 number , REAL8 value , UNSIGNED8 Pos , INTEGER4 bucket } ) —

---

## FUNCTION BucketRanges

[FieldAggregates](#) \

	BucketRanges
	(Types.t_Discrete n)

No Documentation Found

**PARAMETER** n ||| INTEGER4 — No Doc

**RETURN** TABLE ( { UNSIGNED2 wi , UNSIGNED4 number , INTEGER4 bucket , REAL8 Min , REAL8 Max , UNSIGNED8 cnt } ) —

---

## ATTRIBUTE Modes

[FieldAggregates](#) \

	Modes
--	-------

No Documentation Found

**RETURN** TABLE ( { UNSIGNED2 wi , UNSIGNED4 number , REAL8 mode , UNSIGNED8 cnt } ) —

---

## ATTRIBUTE Cardinality

[FieldAggregates](#) \

	<b>Cardinality</b>
--	--------------------

No Documentation Found

**RETURN** TABLE ( { UNSIGNED2 wi , UNSIGNED4 number , UNSIGNED8 cardinality } ) —

**ATTRIBUTE** RankedInput

[FieldAggregates](#) \

	<b>RankedInput</b>
--	--------------------

No Documentation Found

**RETURN** TABLE ( { UNSIGNED2 wi , UNSIGNED8 id , UNSIGNED4 number , REAL8 value , REAL8 Pos } ) —

**FUNCTION** NTiles

[FieldAggregates](#) \

	<b>NTiles</b>
	(Types.t_Discrete n)

No Documentation Found

**PARAMETER** n ||| INTEGER4 — No Doc

**RETURN** TABLE ( { UNSIGNED2 wi , UNSIGNED8 id , UNSIGNED4 number , REAL8 value , REAL8 Pos , INTEGER4 ntile } ) —

## FUNCTION NTileRanges

[FieldAggregates](#) \

	<b>NTileRanges</b>
	(Types.t_Discrete n)

No Documentation Found

**PARAMETER** n ||| INTEGER4 — No Doc

**RETURN** TABLE ( { UNSIGNED2 wi , UNSIGNED4 number , INTEGER4 ntile ,  
REAL8 Min , REAL8 Max , UNSIGNED8 cnt } ) —

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# ML\_Core/ FromField

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## DESCRIPTIONS

### MACRO FromField

	FromField
(dIn,lOut,dOut,dMap=")	

No Documentation Found

**PARAMETER** din ||| INTEGER8 — No Doc

**PARAMETER** dout ||| INTEGER8 — No Doc

**PARAMETER** dmap ||| INTEGER8 — No Doc

**PARAMETER** lout ||| INTEGER8 — No Doc

**RETURN** —

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# ML\_Core/ Generate

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## IMPORTS

ML\_Core | ML\_Core.Types |

## DESCRIPTIONS

### **MODULE** Generate

	Generate
--	----------

No Documentation Found

### Children

1. [tp\\_Method](#) : No Documentation Found
2. [MethodName](#) : No Documentation Found
3. [ToPoly](#) : No Documentation Found

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### **ATTRIBUTE** tp\_Method

[Generate](#) \

	<b>tp_Method</b>
--	------------------

No Documentation Found

**RETURN** UNSIGNED1 —

**FUNCTION** **MethodName**

[Generate \](#)

	<b>MethodName</b>
	(tp_Method x)

No Documentation Found

**PARAMETER** x ||| UNSIGNED1 — No Doc

**RETURN** STRING7 —

**FUNCTION** **ToPoly**

[Generate \](#)

	<b>ToPoly</b>
	(DATASET(Types.NumericField) seedCol, UNSIGNED maxN=6)

No Documentation Found

**PARAMETER** maxn ||| UNSIGNED8 — No Doc

**PARAMETER** seedcol ||| TABLE ( NumericField ) — No Doc

**RETURN** TABLE ( { UNSIGNED2 wi , UNSIGNED8 id , UNSIGNED4 number , REAL8 value } ) —



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# ML\_Core/ ToField

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## DESCRIPTIONS

### MACRO ToField

ToField
(dIn,dOut,idfield=", wifield=", wivalue=",datafields=)

No Documentation Found

**PARAMETER** wifield ||| INTEGER8 — No Doc

**PARAMETER** dout ||| INTEGER8 — No Doc

**PARAMETER** idfield ||| INTEGER8 — No Doc

**PARAMETER** din ||| INTEGER8 — No Doc

**PARAMETER** datafields ||| INTEGER8 — No Doc

**PARAMETER** wivalue ||| INTEGER8 — No Doc

**RETURN** —

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## DESCRIPTIONS

### **MODULE** Types

	Types
--	-------

No Documentation Found

### Children

1. [t\\_RecordID](#) : No Documentation Found
2. [t\\_FieldNumber](#) : No Documentation Found
3. [t\\_FieldReal](#) : No Documentation Found
4. [t\\_FieldSign](#) : No Documentation Found
5. [t\\_Discrete](#) : No Documentation Found
6. [t\\_Item](#) : No Documentation Found
7. [t\\_Count](#) : No Documentation Found
8. [t\\_Work\\_Item](#) : No Documentation Found
9. [AnyField](#) : No Documentation Found
10. [NumericField](#) : No Documentation Found
11. [DiscreteField](#) : No Documentation Found
12. [Layout\\_Model](#) : No Documentation Found
13. [Classify\\_Result](#) : No Documentation Found
14. [l\\_result](#) : No Documentation Found

- 15. [Confusion\\_Detail](#) : No Documentation Found
- 16. [ItemElement](#) : No Documentation Found
- 17. [t\\_node](#) : No Documentation Found
- 18. [t\\_level](#) : No Documentation Found
- 19. [NodeID](#) : No Documentation Found

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**ATTRIBUTE** t\_RecordID

[Types](#) \

t_RecordID
------------

No Documentation Found

**RETURN** UNSIGNED8 —

---

**ATTRIBUTE** t\_FieldNumber

[Types](#) \

t_FieldNumber
---------------

No Documentation Found

**RETURN** UNSIGNED4 —

## ATTRIBUTE t\_FieldReal

[Types \](#)

	t_FieldReal
--	-------------

No Documentation Found

**RETURN** REAL8 —

---

## ATTRIBUTE t\_FieldSign

[Types \](#)

	t_FieldSign
--	-------------

No Documentation Found

**RETURN** INTEGER1 —

---

## ATTRIBUTE t\_Discrete

[Types \](#)

	t_Discrete
--	------------

No Documentation Found

**RETURN** INTEGER4 —

---

## ATTRIBUTE t\_Item

[Types \](#)

	t_Item
--	--------

No Documentation Found

**RETURN** UNSIGNED4 —

---

## ATTRIBUTE t\_Count

[Types \](#)

	t_Count
--	---------

No Documentation Found

**RETURN** UNSIGNED8 —

---

## ATTRIBUTE t\_Work\_Item

[Types \](#)

	t_Work_Item
--	-------------

No Documentation Found

**RETURN** UNSIGNED2 —

---

## RECORD AnyField

Types \

	AnyField
--	----------

No Documentation Found

**FIELD** wi ||| UNSIGNED2 — No Doc

**FIELD** id ||| UNSIGNED8 — No Doc

**FIELD** number ||| UNSIGNED4 — No Doc

---

## RECORD NumericField

Types \

	NumericField
--	--------------

No Documentation Found

**FIELD** wi ||| UNSIGNED2 — No Doc

**FIELD** id ||| UNSIGNED8 — No Doc

**FIELD** number ||| UNSIGNED4 — No Doc

**FIELD** value ||| REAL8 — No Doc

---

## RECORD DiscreteField

Types \

	DiscreteField
--	---------------

No Documentation Found

**FIELD** wi ||| UNSIGNED2 — No Doc

**FIELD** id ||| UNSIGNED8 — No Doc

**FIELD** number ||| UNSIGNED4 — No Doc

**FIELD** value ||| INTEGER4 — No Doc

---

## **RECORD** Layout\_Model

Types \

	Layout_Model
--	--------------

No Documentation Found

**FIELD** wi ||| UNSIGNED2 — No Doc

**FIELD** id ||| UNSIGNED8 — No Doc

**FIELD** number ||| UNSIGNED4 — No Doc

**FIELD** value ||| REAL8 — No Doc

---

## **RECORD** Classify\_Result

Types \

	Classify_Result
--	-----------------

No Documentation Found

**FIELD** wi ||| UNSIGNED2 — No Doc

**FIELD** conf ||| REAL8 — No Doc

**FIELD** id ||| UNSIGNED8 — No Doc

**FIELD** number ||| UNSIGNED4 — No Doc



**FIELD** value ||| INTEGER4 — No Doc

---

## **RECORD** l\_result

Types \

	l_result
--	----------

No Documentation Found

**FIELD** wi ||| UNSIGNED2 — No Doc

**FIELD** conf ||| REAL8 — No Doc

**FIELD** id ||| UNSIGNED8 — No Doc

**FIELD** number ||| UNSIGNED4 — No Doc

**FIELD** value ||| INTEGER4 — No Doc

---

## **RECORD** Confusion\_Detail

Types \

	Confusion_Detail
--	------------------

No Documentation Found

**FIELD** correct ||| BOOLEAN — No Doc

**FIELD** predict\_class ||| INTEGER4 — No Doc

**FIELD** classifier ||| UNSIGNED4 — No Doc

**FIELD** wi ||| UNSIGNED2 — No Doc

**FIELD** occurs ||| UNSIGNED4 — No Doc

**FIELD** actual\_class ||| INTEGER4 — No Doc

---

## RECORD ItemElement

Types \

	ItemElement
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No Documentation Found

**FIELD** wi ||| UNSIGNED2 — No Doc

**FIELD** id ||| UNSIGNED8 — No Doc

**FIELD** value ||| UNSIGNED4 — No Doc

---

## ATTRIBUTE t\_node

Types \

	t_node
--	--------

No Documentation Found

**RETURN** INTEGER4 —

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## ATTRIBUTE t\_level

Types \

	t_level
--	---------

No Documentation Found

**RETURN** UNSIGNED2 —

## RECORD NodeID

Types \

	NodeID
--	--------

No Documentation Found

**FIELD** wi ||| UNSIGNED2 — No Doc

**FIELD** node\_id ||| INTEGER4 — No Doc

**FIELD** level ||| UNSIGNED2 — No Doc

---