

My Project

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Contents

1	Namespace Index	1
1.1	Packages	1
2	Hierarchical Index	3
2.1	Class Hierarchy	3
3	Class Index	5
3.1	Class List	5
4	Namespace Documentation	7
4.1	SAD_test.Point_AnomalyDetector.lof Namespace Reference	7
4.1.1	Detailed Description	7
5	Class Documentation	9
5.1	SAD_test.Point_AnomalyDetector.AnomalyScorer.AnomalyScorer Class Reference	9
5.2	SAD_test.Stream_AnomalyDetector.CUSUM.CUSUM Class Reference	9
5.3	SAD_test.Stream_Generator.Dataset_Generator.Dataset_Generator Class Reference	10
5.4	SAD_test.Stream_AnomalyDetector.DDM.DDM Class Reference	10
5.5	SAD_test.Point_AnomalyDetector.Fit_data.Fit_data Class Reference	11
5.6	SAD_test.Stream_Generator.Generator.Generator Class Reference	11
5.7	SAD_test.Point_AnomalyDetector.lof.LOF Class Reference	12
5.7.1	Constructor & Destructor Documentation	12
5.7.1.1	__init__(self, knn)	12
5.7.2	Member Function Documentation	12
5.7.2.1	anomaly_score(self, X, in_training_set=False)	12
5.8	SAD_test.Point_AnomalyDetector.LOFAnomalyScorer.LOFAnomalyScorer Class Reference	12
5.9	SAD_test.Point_AnomalyDetector.PyiscAnomalyScorer.PyiscAnomalyScorer Class Reference	13
5.10	SAD_test.Point_AnomalyDetector.PyiscAnomalyScorer_advanced.PyiscAnomalyScorer_advanced Class Reference	13
5.11	SAD_test.Stream_Generator.Simulation_Generator.Simulation_Generator Class Reference	14
5.12	SAD_test.Stream_AnomalyDetector.Stream_Detector.Stream_Detector Class Reference	15
5.13	SAD_test.Stream_Generator.Timestamp_Dataset_Generator.Timestamp_Dataset_Generator Class Reference	15
	Index	17

Chapter 1

Namespace Index

1.1 Packages

Here are the packages with brief descriptions (if available):

SAD_test.Point_AnomalyDetector.lof	7
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Chapter 2

Hierarchical Index

2.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

SAD_test.Point_AnomalyDetector.Fit_data.Fit_data	11
SAD_test.Point_AnomalyDetector.lof.LOF	12
object	
SAD_test.Point_AnomalyDetector.AnomalyScorer.AnomalyScorer	9
SAD_test.Stream_AnomalyDetector.Stream_Detector.Stream_Detector	15
SAD_test.Stream_Generator.Generator.Generator	11
AnomalyScorer	
SAD_test.Point_AnomalyDetector.LOFAnomalyScorer.LOFAnomalyScorer	12
SAD_test.Point_AnomalyDetector.PyiscAnomalyScorer.PyiscAnomalyScorer	13
SAD_test.Point_AnomalyDetector.PyiscAnomalyScorer_advanced.PyiscAnomalyScorer_advanced	13
Generator	
SAD_test.Stream_Generator.Dataset_Generator.Dataset_Generator	10
SAD_test.Stream_Generator.Simulation_Generator.Simulation_Generator	14
SAD_test.Stream_Generator.Timestamp_Dataset_Generator.Timestamp_Dataset_Generator	15
Stream_Detector	
SAD_test.Stream_AnomalyDetector.CUSUM.CUSUM	9
SAD_test.Stream_AnomalyDetector.DDM.DDM	10

Chapter 3

Class Index

3.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

SAD_test.Point_AnomalyDetector.AnomalyScorer.AnomalyScorer	9
SAD_test.Stream_AnomalyDetector.CUSUM.CUSUM	9
SAD_test.Stream_Generator.Dataset_Generator.Dataset_Generator	10
SAD_test.Stream_AnomalyDetector.DDM.DDM	10
SAD_test.Point_AnomalyDetector.Fit_data.Fit_data	11
SAD_test.Stream_Generator.Generator.Generator	11
SAD_test.Point_AnomalyDetector.lof.LOF	12
SAD_test.Point_AnomalyDetector.LOFAnomalyScorer.LOFAnomalyScorer	12
SAD_test.Point_AnomalyDetector.PyiscAnomalyScorer.PyiscAnomalyScorer	13
SAD_test.Point_AnomalyDetector.PyiscAnomalyScorer_advanced.PyiscAnomalyScorer_advanced	13
SAD_test.Stream_Generator.Simulation_Generator.Simulation_Generator	14
SAD_test.Stream_AnomalyDetector.Stream_Detector.Stream_Detector	15
SAD_test.Stream_Generator.Timestamp_Dataset_Generator.Timestamp_Dataset_Generator	15

Chapter 4

Namespace Documentation

4.1 SAD_test.Point_AnomalyDetector.lof Namespace Reference

Classes

- class [LOF](#)

4.1.1 Detailed Description

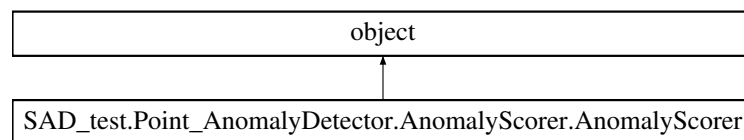
```
:copyright: (c) 2016 Tomas Olsson  
:license: LGPL?
```


Chapter 5

Class Documentation

5.1 SAD_test.Point_AnomalyDetector.AnomalyScorer.AnomalyScorer Class Reference

Inheritance diagram for SAD_test.Point_AnomalyDetector.AnomalyScorer.AnomalyScorer:



Public Member Functions

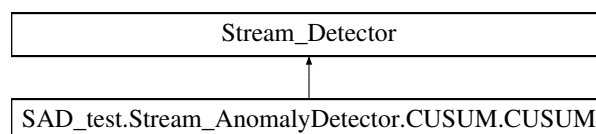
- def **__init__** (self)
- def **Train_PointDetector** (self, data=[])

The documentation for this class was generated from the following file:

- Point_AnomalyDetector/AnomalyScorer.py

5.2 SAD_test.Stream_AnomalyDetector.CUSUM.CUSUM Class Reference

Inheritance diagram for SAD_test.Stream_AnomalyDetector.CUSUM.CUSUM:



Public Member Functions

- def **__init__** (self, drift=1, threshold=1)
- def **check** (self, score)

Public Attributes

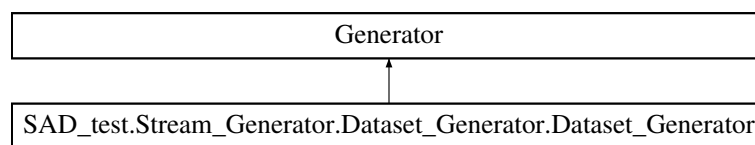
- **Detector**

The documentation for this class was generated from the following file:

- Stream_AnomalyDetector/CUSUM.py

5.3 SAD_test.Stream_Generator.Dataset_Generator.Dataset_Generator Class Reference

Inheritance diagram for SAD_test.Stream_Generator.Dataset_Generator.Dataset_Generator:



Public Member Functions

- def **__init__** (self, filename, delimiter=",", normal_class="value", column=-1, type_error="Sudden")
- def **Generate_TrainData** (self, percentage)
- def **Generate_Stream** (self, type, number)

Public Attributes

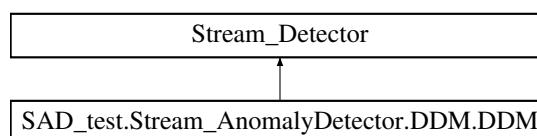
- **attribute**
- **Normal_data_set**
- **Anormal_data_set**
- **train**
- **test**
- **type_error**

The documentation for this class was generated from the following file:

- Stream_Generator/Dataset_Generator.py

5.4 SAD_test.Stream_AnomalyDetector.DDM.DDM Class Reference

Inheritance diagram for SAD_test.Stream_AnomalyDetector.DDM.DDM:



Public Member Functions

- def **__init__** (self, threshold=1)
- def **check** (self, score)

Public Attributes

- **Detector**

The documentation for this class was generated from the following file:

- Stream_AnomalyDetector/DDM.py

5.5 SAD_test.Point_AnomalyDetector.Fit_data.Fit_data Class Reference

Public Member Functions

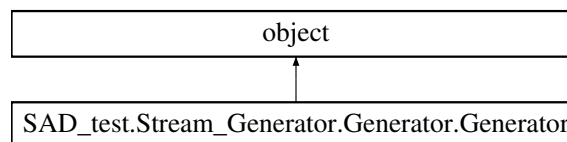
- def **find_distribution** (self, data, test_distribution=['norm'])

The documentation for this class was generated from the following file:

- Point_AnomalyDetector/Fit_data.py

5.6 SAD_test.Stream_Generator.Generator.Generator Class Reference

Inheritance diagram for SAD_test.Stream_Generator.Generator.Generator:



Public Member Functions

- def **__init__** (self, type_error="Sudden")
- def **Generate_TrainData** (self)
- def **Generate_Stream** (self, type_error="Normal", number=0)

Public Attributes

- **type_error**

The documentation for this class was generated from the following file:

- Stream_Generator/Generator.py

5.7 SAD_test.Point_AnomalyDetector.lof.LOF Class Reference

Public Member Functions

- def `__init__` (self, knn)
- def `anomaly_score` (self, X, in_training_set=False)
- def `anomaly_score_training_data` (self)

5.7.1 Constructor & Destructor Documentation

5.7.1.1 def SAD_test.Point_AnomalyDetector.lof.LOF.__init__ (self, knn)

Class LOF implements the Local Outlier Factor algorithm, see <http://www.dbs.ifi.lmu.de/Publikationen/Papers/LOF.pdf>. It uses the scikit-learn nearest neighbour algorithm to retrieve neighbours and compute anomaly scores for data given a training set in the knn. So, for updating the algorithm, the knn instance should be updated.

```
:param knn: an instance of klearn.neighbors.base.KNeighborsMixin, for instance, sklearn.neighbors.unsupervised
:return:
```

5.7.2 Member Function Documentation

5.7.2.1 def SAD_test.Point_AnomalyDetector.lof.LOF.anomaly_score (self, X, in_training_set=False)

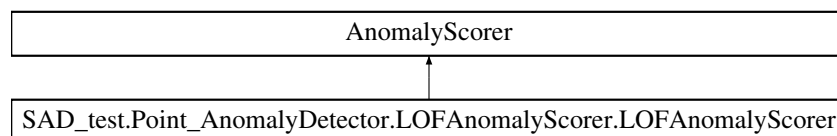
```
:param X: an array containing data to score
:param in_training_set: a boolean that indicates whether the scored data set is present in the training data s
:return: an anomaly score for each data point in X
```

The documentation for this class was generated from the following file:

- Point_AnomalyDetector/lof.py

5.8 SAD_test.Point_AnomalyDetector.LOFAnomalyScorer.LOFAnomalyScorer Class Reference

Inheritance diagram for SAD_test.Point_AnomalyDetector.LOFAnomalyScorer.LOFAnomalyScorer:



Public Member Functions

- def `__init__` (self, n_neighbors=10, algorithm='auto')
- def `Train_PointDetector` (self, data)

Public Attributes

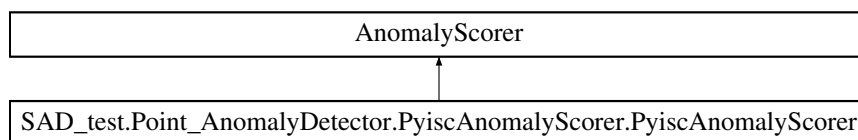
- **n_neighbors**
- **algorithm**

The documentation for this class was generated from the following file:

- Point_AnomalyDetector/LOFAnomalyScorer.py

5.9 SAD_test.Point_AnomalyDetector.PyiscAnomalyScorer.PyiscAnomalyScorer Class Reference

Inheritance diagram for SAD_test.Point_AnomalyDetector.PyiscAnomalyScorer.PyiscAnomalyScorer:

**Public Member Functions**

- def **__init__** (self, models=[])
- def **Train_PointDetector** (self, data=[])

Public Attributes

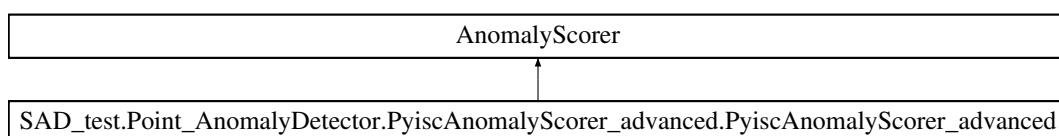
- **Fit_data**
- **component_models**

The documentation for this class was generated from the following file:

- Point_AnomalyDetector/PyiscAnomalyScorer.py

5.10 SAD_test.Point_AnomalyDetector.PyiscAnomalyScorer_advanced.PyiscAnomalyScorer_advanced Class Reference

Inheritance diagram for SAD_test.Point_AnomalyDetector.PyiscAnomalyScorer_advanced.PyiscAnomalyScorer_advanced:



Public Member Functions

- def **__init__** (self, dist=['norm'])
- def **Train_PointDetector** (self, data)

Public Attributes

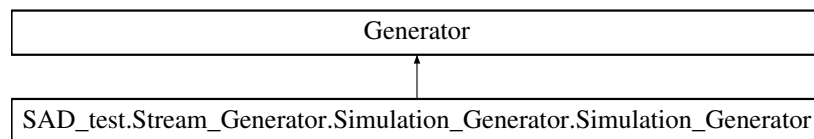
- **Fit_data**
- **test_distribution**

The documentation for this class was generated from the following file:

- Point_AnomalyDetector/PyiscAnomalyScorer_advanced.py

5.11 SAD_test.Stream_Generator.Simulation_Generator.Simulation_Generator Class Reference

Inheritance diagram for SAD_test.Stream_Generator.Simulation_Generator.Simulation_Generator:



Public Member Functions

- def **__init__** (self, list_distribution, normal_error_distribution, anomaly_error_distribution, type_ \leftrightarrow error="Sudden")
- def **Generate_TrainData** (self, number)
- def **Generate_Stream** (self, type, number)

Public Attributes

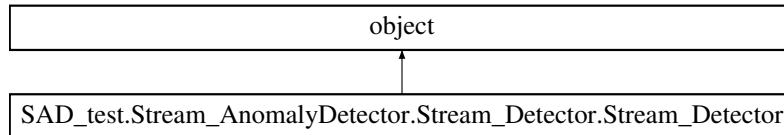
- **list_distribution**
- **normal_error_distribution**
- **anomaly_error_distribution**
- **type_error**

The documentation for this class was generated from the following file:

- Stream_Generator/Simulation_Generator.py

5.12 SAD_test.Stream_AnomalyDetector.Stream_Detector.Stream_Detector Class Reference

Inheritance diagram for SAD_test.Stream_AnomalyDetector.Stream_Detector.Stream_Detector:



Public Member Functions

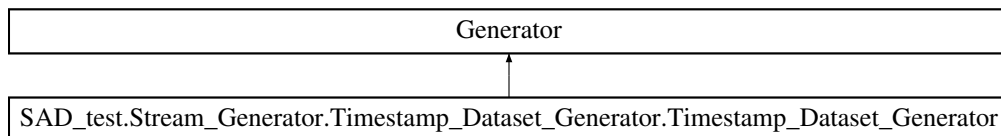
- def **__init__** (self, para=0.0)
- def **check** (self, score=0.0)

The documentation for this class was generated from the following file:

- Stream_AnomalyDetector/Stream_Detector.py

5.13 SAD_test.Stream_Generator.Timestamp_Dataset_Generator.Timestamp_Dataset_Generator Class Reference

Inheritance diagram for SAD_test.Stream_Generator.Timestamp_Dataset_Generator.Timestamp_Dataset_Generator:



Public Member Functions

- def **__init__** (self, filename, delimiter=",", del_timestamp_column=True, timestamp_column=0)
- def **Generate_TrainData** (self, percentage)
- def **Generate_Stream** (self, type="Normal", number=1)

Public Attributes

- **attribute**
- **data_set**
- **train**
- **test**
- **currentpoint**

The documentation for this class was generated from the following file:

- Stream_Generator/Timestamp_Dataset_Generator.py

Index

- `__init__`
 - `SAD_test::Point_AnomalyDetector::lof::LOF`, [12](#)
- `anomaly_score`
 - `SAD_test::Point_AnomalyDetector::lof::LOF`, [12](#)
- `SAD_test.Point_AnomalyDetector.AnomalyScorer`.↔
 - `AnomalyScorer`, [9](#)
- `SAD_test.Point_AnomalyDetector.Fit_data.Fit_data`, [11](#)
- `SAD_test.Point_AnomalyDetector.LOFAnomaly`↔
 - `Scorer.LOFAnomalyScorer`, [12](#)
- `SAD_test.Point_AnomalyDetector.lof`, [7](#)
- `SAD_test.Point_AnomalyDetector.lof.LOF`, [12](#)
- `SAD_test.Point_AnomalyDetector.PyiscAnomaly`↔
 - `Scorer.PyiscAnomalyScorer`, [13](#)
- `SAD_test.Point_AnomalyDetector.PyiscAnomaly`↔
 - `Scorer_advanced.PyiscAnomalyScorer`↔
 - `advanced`, [13](#)
- `SAD_test.Stream_AnomalyDetector.CUSUM.CUSUM`, [9](#)
- `SAD_test.Stream_AnomalyDetector.DDM.DDM`, [10](#)
- `SAD_test.Stream_AnomalyDetector.Stream_Detector`.↔
 - `Stream_Detector`, [15](#)
- `SAD_test.Stream_Generator.Dataset_Generator`.↔
 - `Dataset_Generator`, [10](#)
- `SAD_test.Stream_Generator.Generator.Generator`, [11](#)
- `SAD_test.Stream_Generator.Simulation_Generator`.↔
 - `Simulation_Generator`, [14](#)
- `SAD_test.Stream_Generator.Timestamp_Dataset`↔
 - `Generator.Timestamp_Dataset_Generator`, [15](#)
- `SAD_test::Point_AnomalyDetector::lof::LOF`
 - `__init__`, [12](#)
 - `anomaly_score`, [12](#)