A3DP GUI Toolkit

0.3

Generated by Doxygen 1.9.1

1 A3DP GUI Toolkit	1
1.1 Introduction	1
1.2 How Does It Work?	1
1.3 Requirements	1
1.4 Installation	2
1.5 Post-Installation	2
1.6 References	2
2 Class Index	3
2.1 Class List	3
3 Class Documentation	5
3.1 ClassifierTester Class Reference	5
3.1.1 Detailed Description	
3.1.2 Constructor & Destructor Documentation	
3.1.2.1init()	
3.1.3 Member Function Documentation	
3.1.3.1 add action()	
3.1.3.2 tr()	
3.2 ClassifierTrainer Class Reference	
3.2.1 Detailed Description	
3.2.2 Constructor & Destructor Documentation	
3.2.2.1 init ()	
3.2.3 Member Function Documentation	
3.2.3.1 add action()	
3.2.3.2 tr()	
3.3 ContourDetection Class Reference	
3.3.1 Detailed Description	
3.3.2 Constructor & Destructor Documentation	
3.3.2.1init()	
3.3.3 Member Function Documentation	
3.3.3.1 add_action()	
3.3.3.2 tr()	
3.4 EdgeDetection Class Reference	
3.4.1 Detailed Description	
3.4.2 Constructor & Destructor Documentation	
3.4.2.1init()	
3.4.3 Member Function Documentation	
3.4.3.1 add_action()	
3.4.3.2 tr()	_
3.5 FeatDatasetGenerator Class Reference	
3.5.1 Detailed Description	
3.5.2 Constructor & Destructor Documentation	
The state of the s	

3.5.2.1init()	27
3.5.3 Member Function Documentation	28
3.5.3.1 add_action()	28
3.5.3.2 tr()	30
3.6 FourierTransform Class Reference	32
3.6.1 Detailed Description	33
3.6.2 Constructor & Destructor Documentation	33
3.6.2.1init()	33
3.6.3 Member Function Documentation	34
3.6.3.1 add_action()	34
3.6.3.2 tr()	35
3.7 GaborFilter Class Reference	37
3.7.1 Detailed Description	38
3.7.2 Constructor & Destructor Documentation	38
3.7.2.1init()	38
3.7.3 Member Function Documentation	39
3.7.3.1 add_action()	39
3.7.3.2 tr()	40
3.8 Histogram Class Reference	42
3.8.1 Detailed Description	43
3.8.2 Constructor & Destructor Documentation	43
3.8.2.1init()	43
3.8.3 Member Function Documentation	44
3.8.3.1 add_action()	44
3.8.3.2 tr()	45
3.9 HuMoments Class Reference	47
3.9.1 Detailed Description	48
3.9.2 Constructor & Destructor Documentation	48
3.9.2.1init()	48
3.9.3 Member Function Documentation	49
3.9.3.1 add_action()	49
3.9.3.2 tr()	50
3.10 ImageFusion Class Reference	52
3.10.1 Detailed Description	53
3.10.2 Constructor & Destructor Documentation	53
3.10.2.1init()	53
3.10.3 Member Function Documentation	54
3.10.3.1 add_action()	54
3.10.3.2 tr()	55
3.11 ImageRegistration Class Reference	57
3.11.1 Detailed Description	58
3.12 LeeSigmaFilter Class Reference	58

3.12.1 Detailed Description	58
3.12.2 Member Function Documentation	59
3.12.2.1 add_action()	59
3.13 MarkovChainCFAR Class Reference	60
3.13.1 Detailed Description	60
3.13.2 Constructor & Destructor Documentation	61
3.13.2.1init()	61
3.13.3 Member Function Documentation	62
3.13.3.1 add_action()	62
3.13.3.2 tr()	63
3.14 ModelBasedCFAR Class Reference	65
3.14.1 Detailed Description	66
3.14.2 Constructor & Destructor Documentation	66
3.14.2.1init()	66
3.14.3 Member Function Documentation	67
3.14.3.1 add_action()	67
3.14.3.2 tr()	68
3.15 MultiCFAR Class Reference	70
3.15.1 Detailed Description	71
3.15.2 Constructor & Destructor Documentation	71
3.15.2.1init()	71
3.15.3 Member Function Documentation	72
3.15.3.1 add_action()	72
3.15.3.2 tr()	73
3.16 MultiHypothesis Class Reference	75
3.16.1 Detailed Description	76
3.16.2 Constructor & Destructor Documentation	76
3.16.2.1init()	76
3.16.3 Member Function Documentation	77
3.16.3.1 add_action()	77
3.16.3.2 tr()	79
3.17 RangeDopplerTerrainCorrection Class Reference	81
3.17.1 Detailed Description	82
3.17.2 Constructor & Destructor Documentation	82
3.17.2.1init()	82
3.17.3 Member Function Documentation	83
3.17.3.1 add_action()	83
3.17.3.2 tr()	84
3.18 RefinedLeeFilter Class Reference	86
3.18.1 Detailed Description	87
3.18.2 Member Function Documentation	87
3.18.2.1 add action()	87

3.19 Segmentation Class Reference
3.19.1 Detailed Description
3.19.2 Constructor & Destructor Documentation
3.19.2.1init()
3.19.3 Member Function Documentation
3.19.3.1 add_action()
3.19.3.2 tr()
3.20 SettingsConfiguration Class Reference
3.20.1 Detailed Description
3.20.2 Constructor & Destructor Documentation
3.20.2.1init()
3.20.3 Member Function Documentation
3.20.3.1 add_action()
3.20.3.2 tr()
3.21 SpeckleFilter Class Reference
3.21.1 Detailed Description
3.21.2 Constructor & Destructor Documentation
3.21.2.1init()
3.21.3 Member Function Documentation
3.21.3.1 add_action()
3.21.3.2 tr()
3.22 TamuraFilter Class Reference
3.22.1 Detailed Description
3.22.2 Member Function Documentation
3.22.2.1 add_action()
3.23 TargetOrientation Class Reference
3.23.1 Detailed Description
3.23.2 Member Function Documentation
3.23.2.1 add_action()
3.23.2.2 tr()
3.24 TargetSegmentation Class Reference
3.24.1 Detailed Description
3.24.2 Member Function Documentation
3.24.2.1 add_action()
3.24.2.2 tr()

A3DP GUI Toolkit

1.1 Introduction

This directory contains a collection of Graphical User Interfaces (GUIs) based on the QGIS plugin platform. The GUIs are dialog-based user interfaces designed in Qt-5. The QGIS plugins platform supports the Python programming language, and as a result the A3DP GUI Toolkit is written in Python 3.7.

1.2 How Does It Work?

The Python-based QGIS plugins are designed as wrappers for the C++ software modules for SMACT. The QGIS plugins accept user input through the GUI dialogs, then pass on these input parameters to the C++ command line.

1.3 Requirements

The following pre-requisites must be satisfied to install and use the plugins.

- QGIS version 3.14 or newer
 - Version 3.16 long-term release is preferred for stability

To build documentation (optional), the following additional software are required.

- Doxygen v 1.8.18 or newer
- doxypypy v 0.8.8 or newer
- LaTex (optional) to create a PDF document

2 A3DP GUI Toolkit

1.4 Installation

The plugins are installed in three steps:

- 1. Install QGIS
- 2. Deploy/Install plugins
- 3. Activate/Enable plugins in QGIS

Please follow the instructions provided in the ![user manual][1] to install the plugins.

1.5 Post-Installation

The installation will create menu items in QGIS, named Image Registration and ATDR. These will have sub-menu items corresponding to the different software modules delivered under SMACT.

To use these C++ software, their location must be specified to the plugins. To specify the location, first launch the Image Registration > Settings Configuration plugin, then click the button [...] and select the folder (called qgis-exes).

The C++ software can be located anywhere on the same computer. If using the installer, setup.cmd version 0.3 or newer, the software will typically be placed at C: \OSGeo4W64\smact. In older versions, the installer will NOT copy the downloaded C++ software. In either case, users can manually copy all the EXE and DLL files to any folder on the computer, and select that folder from the Image Registration > Settings Configuration plugin dialog.

1.6 References

[1]: AUG Signals, "SMACT UI Installation Manual.pdf", August 2021

Namespace Index

2.1 Packages

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

classifier_tester.classifier_tester
classifier_trainer.classifier_trainer
contour_detection.contour_detection
edge_detection.edge_detection
feat_dataset_generator.feat_dataset_generator
fourier_transform.fourier_transform
gabor_filter.gabor_filter
histogram.histogram
hu_moment.hu_moment
image_fusion.image_fusion
image_registration.image_registration
lee_sigma_filter.lee_sigma_filter
markov_chain_cfar.markov_chain_cfar
model_based_cfar.model_based_cfar
multi_cfar.multi_cfar
multihypothesis.multihypothesis ??
range_doppler.range_doppler
refined_lee_filter.refined_lee_filter
segmentation.segmentation
settings_configuration.settings_configuration
speckle_filter.speckle_filter
tamura_filter.tamura_filter
target_orientation.target_orientation
target segmentation.target segmentation

4 Namespace Index

Class Index

3.1 Class List

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

classifier_tester.classifier_tester.ClassifierTester	
QGIS Plugin Implementation	5
classifier_trainer.classifier_trainer.ClassifierTrainer	
QGIS Plugin Implementation	11
contour_detection.contour_detection.ContourDetection	
QGIS Plugin Implementation	16
edge_detection.edge_detection.EdgeDetection	
QGIS Plugin Implementation	21
feat_dataset_generator.feat_dataset_generator.FeatDatasetGenerator	
QGIS Plugin Implementation	26
fourier_transform.fourier_transform.FourierTransform	
QGIS Plugin Implementation	32
gabor_filter.gabor_filter.GaborFilter	
QGIS Plugin Implementation	37
histogram. Histogram	
QGIS Plugin Implementation	42
hu_moment.hu_moments	
QGIS Plugin Implementation	47
image_fusion.image_fusion.ImageFusion	
QGIS Plugin Implementation	52
image_registration.image_registration.ImageRegistration	
QGIS Plugin Implementation	57
lee_sigma_filter.lee_sigma_filter.LeeSigmaFilter	
QGIS Plugin Implementation	58
markov_chain_cfar.markov_chain_cfar.MarkovChainCFAR	
QGIS Plugin Implementation	60
model_based_cfar.model_based_cfar.ModelBasedCFAR	
QGIS Plugin Implementation	65
multi_cfar.multi_cfar.MultiCFAR	
QGIS Plugin Implementation	70
multihypothesis.multihypothesis.MultiHypothesis	
QGIS Plugin Implementation	75
range_doppler.range_doppler.RangeDopplerTerrainCorrection	
QGIS Plugin Implementation	81
refined_lee_filter.refined_lee_filter.RefinedLeeFilter	
QGIS Plugin Implementation	86

6 Class Index

segmentation.segmentation.Segmentation	
QGIS Plugin Implementation	88
settings_configuration.settings_configuration.SettingsConfiguration	
QGIS Plugin Implementation	94
speckle_filter.speckle_filter.SpeckleFilter	
QGIS Plugin Implementation	99
amura_filter.tamura_filter.TamuraFilter	
QGIS Plugin Implementation	104
target_orientation.target_orientation.TargetOrientation	
QGIS Plugin Implementation	106
target_segmentation.target_segmentation.TargetSegmentation	
OGIS Plugin Implementation	111

File Index

4.1 File List

Here is a list of all files with brief descriptions:

classifier_tester.py	??
classifier_trainer.py	??
contour_detection.py	??
edge_detection.py	??
feat_dataset_generator.py	??
fourier_transform.py	??
gabor_filter.py	??
histogram.py	??
hu_moment.py	??
image_fusion.py	??
image_registration.py	??
lee_sigma_filter.py	??
markov_chain_cfar.py	??
model_based_cfar.py	??
multi_cfar.py	??
multihypothesis.py	??
range_doppler.py	??
refined_lee_filter.py	??
segmentation.py	??
settings_configuration.py	??
speckle_filter.py	??
tamura_filter.py	??
target_orientation.py	??
target segmentation.pv	??

8 File Index

Namespace Documentation

5.1 classifier_tester.classifier_tester Namespace Reference

Classes

• class ClassifierTester

QGIS Plugin Implementation.

5.2 classifier_trainer.classifier_trainer Namespace Reference

Classes

class ClassifierTrainer

QGIS Plugin Implementation.

5.3 contour_detection.contour_detection Namespace Reference

Classes

· class ContourDetection

QGIS Plugin Implementation.

5.4 edge_detection.edge_detection Namespace Reference

Classes

· class EdgeDetection

5.5 feat_dataset_generator.feat_dataset_generator Namespace Reference

Classes

· class FeatDatasetGenerator

QGIS Plugin Implementation.

5.6 fourier_transform.fourier_transform Namespace Reference

Classes

· class FourierTransform

QGIS Plugin Implementation.

5.7 gabor filter.gabor filter Namespace Reference

Classes

· class GaborFilter

QGIS Plugin Implementation.

5.8 histogram.histogram Namespace Reference

Classes

class Histogram

QGIS Plugin Implementation.

5.9 hu moment.hu moment Namespace Reference

Classes

class HuMoments

QGIS Plugin Implementation.

5.10 image_fusion.image_fusion Namespace Reference

Classes

· class ImageFusion

5.11 image registration.image registration Namespace Reference

Classes

· class ImageRegistration

QGIS Plugin Implementation.

5.12 lee_sigma_filter.lee_sigma_filter Namespace Reference

Classes

· class LeeSigmaFilter

QGIS Plugin Implementation.

5.13 markov_chain_cfar.markov_chain_cfar Namespace Reference

Classes

· class MarkovChainCFAR

QGIS Plugin Implementation.

5.14 model based cfar.model based cfar Namespace Reference

Classes

· class ModelBasedCFAR

QGIS Plugin Implementation.

5.15 multi_cfar.multi_cfar Namespace Reference

Classes

class MultiCFAR

QGIS Plugin Implementation.

5.16 multihypothesis.multihypothesis Namespace Reference

Classes

· class MultiHypothesis

5.17 range_doppler.range_doppler Namespace Reference

Classes

• class RangeDopplerTerrainCorrection

QGIS Plugin Implementation.

5.18 refined_lee_filter.refined_lee_filter Namespace Reference

Classes

· class RefinedLeeFilter

QGIS Plugin Implementation.

5.19 segmentation.segmentation Namespace Reference

Classes

· class Segmentation

QGIS Plugin Implementation.

5.20 settings_configuration.settings_configuration Namespace Reference

Classes

· class SettingsConfiguration

QGIS Plugin Implementation.

5.21 speckle_filter.speckle_filter Namespace Reference

Classes

class SpeckleFilter

QGIS Plugin Implementation.

5.22 tamura_filter.tamura_filter Namespace Reference

Classes

· class TamuraFilter

5.23 target_orientation.target_orientation Namespace Reference

Classes

• class TargetOrientation

QGIS Plugin Implementation.

5.24 target_segmentation.target_segmentation Namespace Reference

Classes

• class TargetSegmentation

QGIS Plugin Implementation.

Class Documentation

6.1 classifier_tester.classifier_tester.ClassifierTester Class Reference

QGIS Plugin Implementation.

Collaboration diagram for classifier_tester.classifier_tester.ClassifierTester:

```
classifier_tester.classifier
   _tester.ClassifierTester

+ action
+ actions
+ arguments
+ dlg
+ first_start
+ iface
+ menu
+ output_dialog
+ plugin_dir
+ subMenu
+ translator

+ __init__()
+ add_action()
+ addToCustomMenu()
+ initGui()
+ run()
+ tr()
+ unload()
```

Public Member Functions

```
• def __init__ (self, iface)
```

Constructor.

• def add_action (self, icon_path, text, callback, enabled_flag=True, add_to_menu=True, add_to_toolbar=True, status_tip=None, whats_this=None, parent=None)

Add a toolbar icon to the toolbar.

- def addToCustomMenu (self)
- def initGui (self)

Create the menu entries and toolbar icons inside the QGIS GUI.

· def run (self)

Run method that performs all the real work.

• def tr (self, message)

Get the translation for a string using Qt translation API.

• def unload (self)

Removes the plugin menu item and icon from QGIS GUI.

Public Attributes

- action
- · actions
- · arguments
- dlg
- · first start
- iface
- menu
- · output_dialog
- · plugin_dir
- subMenu
- translator

6.1.1 Detailed Description

QGIS Plugin Implementation.

6.1.2 Constructor & Destructor Documentation

```
6.1.2.1 __init__()

def classifier_tester.classifier_tester.ClassifierTester.__init__ (
```

self, iface)

```
Constructor.
```

```
:param iface: An interface instance that will be passed to this class
   which provides the hook by which you can manipulate the QGIS
   application at run time.
:type iface: QgsInterface
```

6.1.3 Member Function Documentation

6.1.3.1 add_action()

Add a toolbar icon to the toolbar.

```
:param icon_path: Path to the icon for this action. Can be a resource
   path (e.g. ':/plugins/foo/bar.png') or a normal file system path.
:type icon_path: str
:param text: Text that should be shown in menu items for this action.
:param callback: Function to be called when the action is triggered.
:type callback: function
:param enabled_flag: A flag indicating if the action should be enabled
   by default. Defaults to True.
:type enabled_flag: bool
:param add_to_menu: Flag indicating whether the action should also
   be added to the menu. Defaults to True.
:type add_to_menu: bool
:param add_to_toolbar: Flag indicating whether the action should also
   be added to the toolbar. Defaults to True.
:type add_to_toolbar: bool
:param status_tip: Optional text to show in a popup when mouse pointer
   hovers over the action.
:type status_tip: str
:param parent: Parent widget for the new action. Defaults None.
:type parent: QWidget
:param whats_this: Optional text to show in the status bar when the
   mouse pointer hovers over the action.
:returns: The action that was created. Note that the action is also
   added to self.actions list.
:rtype: QAction
```

Here is the call graph for this function:



6.1.3.2 addToCustomMenu()

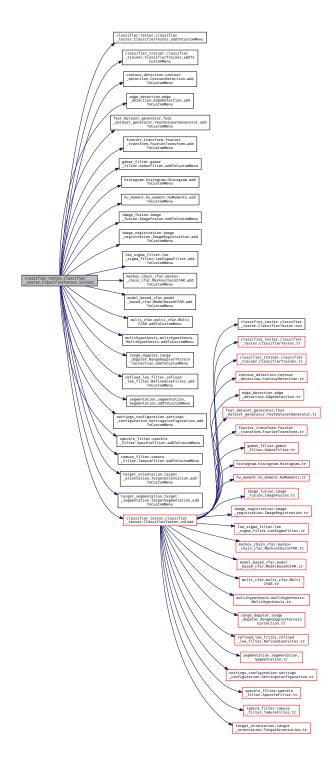
```
def classifier_tester.classifier_tester.ClassifierTester.addToCustomMenu ( self \ )
```

6.1.3.3 initGui()

```
def classifier_tester.classifier_tester.ClassifierTester.initGui ( self \ )
```

Create the menu entries and toolbar icons inside the QGIS GUI.

Here is the call graph for this function:



6.1.3.4 run()

```
def classifier_tester.classifier_tester.ClassifierTester.run ( self )
```

Run method that performs all the real work.

6.1.3.5 tr()

```
def classifier_tester.classifier_tester.ClassifierTester.tr ( self, \\ message \ )
```

Get the translation for a string using Qt translation API.

```
We implement this ourselves since we do not inherit QObject.

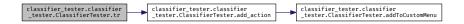
:param message: String for translation.

:type message: str, QString

:returns: Translated version of message.

:rtype: QString
```

Here is the call graph for this function:

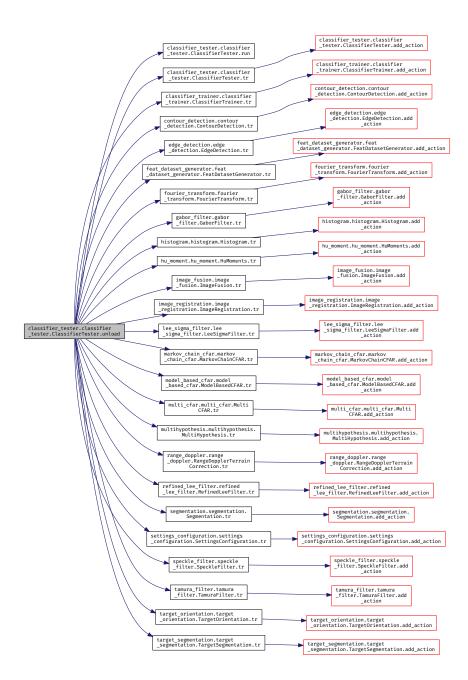


6.1.3.6 unload()

```
def classifier_tester.classifier_tester.ClassifierTester.unload ( self )
```

Removes the plugin menu item and icon from QGIS GUI.

Here is the call graph for this function:



6.1.4 Member Data Documentation

6.1.4.1 action

 ${\tt classifier_tester.classifier_tester.ClassifierTester.action}$

6.1.4.2 actions

 ${\tt classifier_tester.classifier_tester.ClassifierTester.actions}$

6.1.4.3 arguments

classifier_tester.classifier_tester.ClassifierTester.arguments

6.1.4.4 dlg

classifier_tester.classifier_tester.ClassifierTester.dlg

6.1.4.5 first_start

classifier_tester.classifier_tester.ClassifierTester.first_start

6.1.4.6 iface

classifier_tester.classifier_tester.ClassifierTester.iface

6.1.4.7 menu

 ${\tt classifier_tester.classifier_tester.ClassifierTester.menu}$

6.1.4.8 output_dialog

classifier_tester.classifier_tester.ClassifierTester.output_dialog

6.1.4.9 plugin_dir

 ${\tt classifier_tester.ClassifierTester.plugin_dir}$

6.1.4.10 subMenu

classifier_tester.classifier_tester.ClassifierTester.subMenu

6.1.4.11 translator

 ${\tt classifier_tester.classifier_tester.ClassifierTester.translator}$

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

· classifier_tester.py

6.2 classifier_trainer.classifier_trainer.ClassifierTrainer Class Reference

QGIS Plugin Implementation.

Collaboration diagram for classifier_trainer.classifier_trainer.ClassifierTrainer:

```
classifier_trainer.classifier
 _trainer.ClassifierTrainer
+ action
+ actions
+ arguments
+ dlg
+ first_start
+ iface
+ menu
+ output_dialog
+ plugin_dir
+ subMenu
+ translator
   init ()
+ add action()
+ addToCustomMenu()
+ initGui()
+ run()
+ tr()
+ unload()
```

Public Member Functions

```
• def __init__ (self, iface)
```

Constructor.

def add_action (self, icon_path, text, callback, enabled_flag=True, add_to_menu=True, add_to_toolbar=True, status tip=None, whats this=None, parent=None)

Add a toolbar icon to the toolbar.

- def addToCustomMenu (self)
- def initGui (self)

Create the menu entries and toolbar icons inside the QGIS GUI.

· def run (self)

Run method that performs all the real work.

• def tr (self, message)

Get the translation for a string using Qt translation API.

• def unload (self)

Removes the plugin menu item and icon from QGIS GUI.

Public Attributes

- action
- · actions
- · arguments
- dlg
- · first start
- iface
- menu
- · output_dialog
- · plugin_dir
- subMenu
- translator

6.2.1 Detailed Description

QGIS Plugin Implementation.

6.2.2 Constructor & Destructor Documentation

```
:param iface: An interface instance that will be passed to this class
   which provides the hook by which you can manipulate the QGIS
   application at run time.
:type iface: QgsInterface
```

6.2.3 Member Function Documentation

6.2.3.1 add_action()

Add a toolbar icon to the toolbar.

```
:param icon_path: Path to the icon for this action. Can be a resource
   path (e.g. ':/plugins/foo/bar.png') or a normal file system path.
:type icon_path: str
:param text: Text that should be shown in menu items for this action.
:type text: str
:param callback: Function to be called when the action is triggered.
:type callback: function
:param enabled_flag: A flag indicating if the action should be enabled
   by default. Defaults to True.
:type enabled_flag: bool
:param add_to_menu: Flag indicating whether the action should also
   be added to the menu. Defaults to True.
:type add_to_menu: bool
:param add_to_toolbar: Flag indicating whether the action should also
   be added to the toolbar. Defaults to True.
:type add_to_toolbar: bool
:param status_tip: Optional text to show in a popup when mouse pointer
   hovers over the action.
:type status_tip: str
:param parent: Parent widget for the new action. Defaults None.
:type parent: QWidget
:param whats_this: Optional text to show in the status bar when the
   mouse pointer hovers over the action.
:returns: The action that was created. Note that the action is also
   added to self.actions list.
:rtype: QAction
```

Here is the call graph for this function:

6.2.3.2 addToCustomMenu()

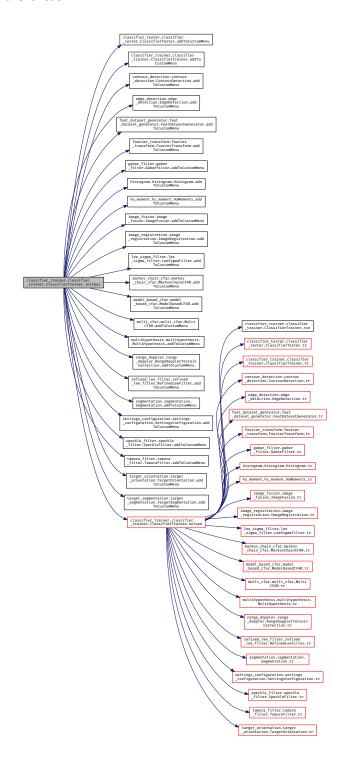
```
\label{lem:classifier_trainer.classifier_trainer.classifier_trainer.addToCustomMenu ( \\ self )
```

6.2.3.3 initGui()

```
def classifier_trainer.classifier_trainer.ClassifierTrainer.initGui ( self\ )
```

Create the menu entries and toolbar icons inside the QGIS GUI.

Here is the call graph for this function:



6.2.3.4 run()

```
def classifier_trainer.classifier_trainer.ClassifierTrainer.run ( self \ )
```

Run method that performs all the real work.

6.2.3.5 tr()

```
def classifier_trainer.classifier_trainer.ClassifierTrainer.tr ( self, \\ message \ )
```

Get the translation for a string using Qt translation API.

```
We implement this ourselves since we do not inherit QObject.

:param message: String for translation.

:type message: str, QString

:returns: Translated version of message.

:rtype: QString
```

Here is the call graph for this function:

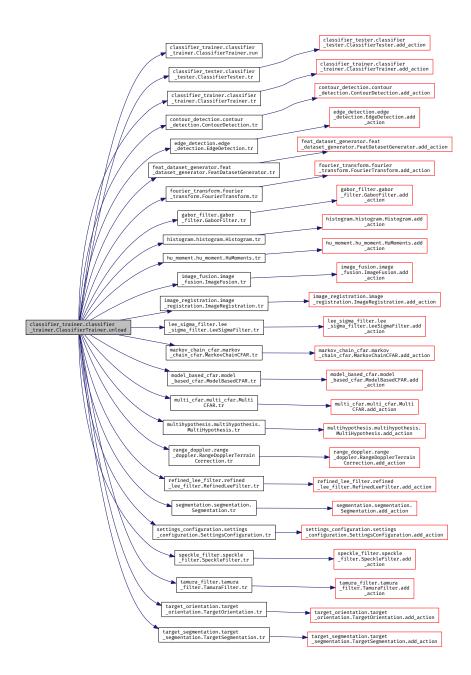
```
classifier trainer.classifier tr
```

6.2.3.6 unload()

```
def classifier_trainer.classifier_trainer.ClassifierTrainer.unload ( self )
```

Removes the plugin menu item and icon from QGIS GUI.

Here is the call graph for this function:



6.2.4 Member Data Documentation

6.2.4.1 action

classifier_trainer.classifier_trainer.ClassifierTrainer.action

6.2.4.2 actions

classifier_trainer.classifier_trainer.ClassifierTrainer.actions

6.2.4.3 arguments

classifier_trainer.classifier_trainer.ClassifierTrainer.arguments

6.2.4.4 dlg

classifier_trainer.classifier_trainer.ClassifierTrainer.dlg

6.2.4.5 first_start

classifier_trainer.classifier_trainer.ClassifierTrainer.first_start

6.2.4.6 iface

 ${\tt classifier_trainer.classifier_trainer.ClassifierTrainer.if} ace$

6.2.4.7 menu

classifier_trainer.classifier_trainer.ClassifierTrainer.menu

6.2.4.8 output_dialog

 ${\tt classifier_trainer.classifier_trainer.ClassifierTrainer.output_dialog}$

6.2.4.9 plugin_dir

 $\verb|classifier_trainer.classifier_trainer.ClassifierTrainer.plugin_dir|\\$

6.2.4.10 subMenu

classifier_trainer.classifier_trainer.ClassifierTrainer.subMenu

6.2.4.11 translator

classifier_trainer.classifier_trainer.ClassifierTrainer.translator

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

· classifier_trainer.py

6.3 contour_detection.contour_detection.ContourDetection Class Reference

QGIS Plugin Implementation.

Collaboration diagram for contour detection.contour detection.ContourDetection:

```
contour detection.contour
detection.ContourDetection
+ action
+ actions
+ arguments
+ dlg
+ first_start
+ iface
+ menu
+ output_dialog
+ plugin_dir
+ subMenu
+ translator
    init ()
+ add_action()
+ addToCustomMenu()
+ display_bands()
+ initGui()
+ run()
+ tr()
+ unload()
```

Public Member Functions

```
    def __init__ (self, iface)
```

Constructor.

 def add_action (self, icon_path, text, callback, enabled_flag=True, add_to_menu=True, add_to_toolbar=True, status tip=None, whats this=None, parent=None)

Add a toolbar icon to the toolbar.

- def addToCustomMenu (self)
- def display_bands (self)
- def initGui (self)

Create the menu entries and toolbar icons inside the QGIS GUI.

• def run (self)

Run method that performs all the real work.

• def tr (self, message)

Get the translation for a string using Qt translation API.

• def unload (self)

Removes the plugin menu item and icon from QGIS GUI.

Public Attributes

- · action
- · actions
- · arguments
- dlg
- · first start
- iface
- menu
- output_dialog
- plugin_dir
- subMenu
- · translator

6.3.1 Detailed Description

QGIS Plugin Implementation.

6.3.2 Constructor & Destructor Documentation

6.3.3 Member Function Documentation

6.3.3.1 add_action()

Add a toolbar icon to the toolbar.

```
:param icon_path: Path to the icon for this action. Can be a resource
   path (e.g. ':/plugins/foo/bar.png') or a normal file system path.
:type icon_path: str
:param text: Text that should be shown in menu items for this action.
:type text: str
:param callback: Function to be called when the action is triggered.
:type callback: function
:param enabled_flag: A flag indicating if the action should be enabled
   by default. Defaults to True.
:type enabled_flag: bool
:param add_to_menu: Flag indicating whether the action should also
   be added to the menu. Defaults to True.
:type add_to_menu: bool
:param add_to_toolbar: Flag indicating whether the action should also
   be added to the toolbar. Defaults to True.
:type add_to_toolbar: bool
:param status_tip: Optional text to show in a popup when mouse pointer
   hovers over the action.
:type status_tip: str
:param parent: Parent widget for the new action. Defaults None.
:type parent: QWidget
:param whats_this: Optional text to show in the status bar when the
   mouse pointer hovers over the action.
:returns: The action that was created. Note that the action is also
   added to self.actions list.
:rtype: QAction
```

Here is the call graph for this function:

```
contour_detection.contour
_detection.ContourDetection.add_action

contour_detection.ContourDetection.add
ToCustomMenu
```

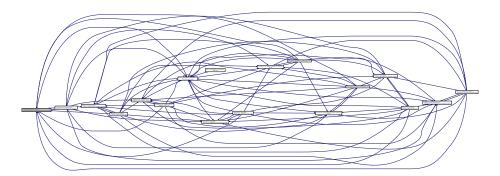
6.3.3.2 addToCustomMenu()

```
\label{lem:contour_detection.contour_detection.ContourDetection.addToCustomMenu ( \\ self )
```

6.3.3.3 display_bands()

```
\label{lem:contour_detection.ContourDetection.display_bands (} self \ )
```

Here is the call graph for this function:

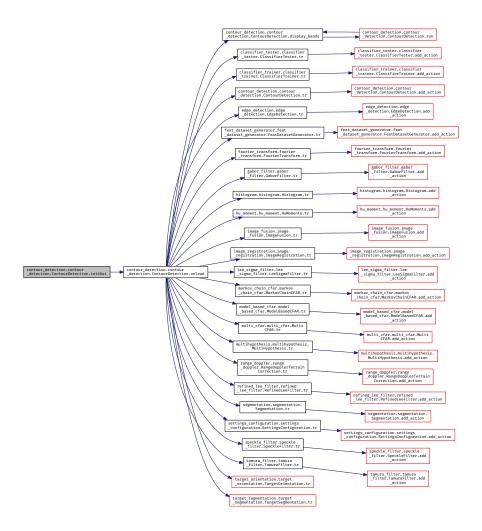


6.3.3.4 initGui()

```
def contour_detection.contour_detection.ContourDetection.initGui ( self \ )
```

Create the menu entries and toolbar icons inside the QGIS GUI.

Here is the call graph for this function:

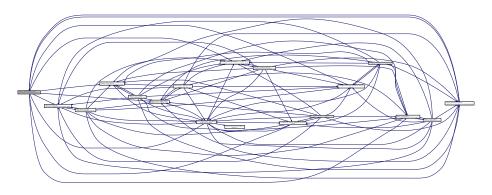


6.3.3.5 run()

```
def contour_detection.contour_detection.ContourDetection.run ( self )
```

Run method that performs all the real work.

Here is the call graph for this function:



6.3.3.6 tr()

Get the translation for a string using Qt translation API.

```
We implement this ourselves since we do not inherit QObject.

:param message: String for translation.

:type message: str, QString

:returns: Translated version of message.

:rtype: QString
```

Here is the call graph for this function:

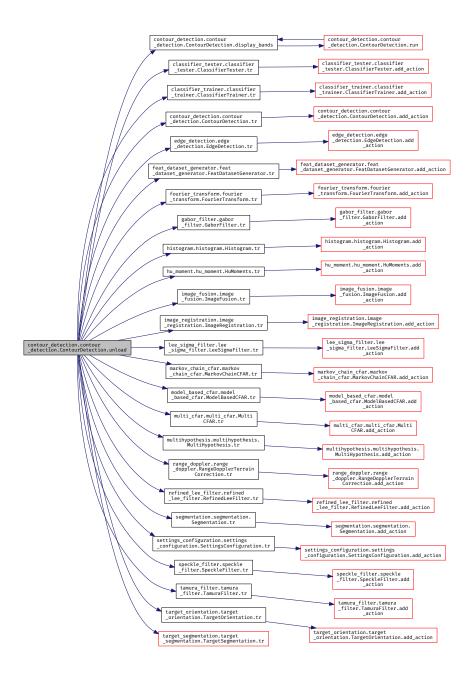


6.3.3.7 unload()

```
def contour_detection.contour_detection.ContourDetection.unload ( self \ )
```

Removes the plugin menu item and icon from QGIS GUI.

Here is the call graph for this function:



6.3.4 Member Data Documentation

6.3.4.1 action

 $\verb"contour_detection.contour_detection.ContourDetection.action"$

6.3.4.2 actions

 $\verb"contour_detection.contour_detection.ContourDetection.actions"$

6.3.4.3 arguments

contour_detection.contour_detection.ContourDetection.arguments

6.3.4.4 dlg

 $\verb"contour_detection.contour_detection.ContourDetection.dlg"$

6.3.4.5 first_start

contour_detection.contour_detection.ContourDetection.first_start

6.3.4.6 iface

 $\verb|contour_detection.contour_detection.ContourDetection.if| ace$

6.3.4.7 menu

contour_detection.contour_detection.ContourDetection.menu

6.3.4.8 output_dialog

 $\verb|contour_detection.contour_detection.ContourDetection.output_dialog|\\$

6.3.4.9 plugin_dir

 $\verb|contour_detection.contour_detection.ContourDetection.plugin_dir|\\$

6.3.4.10 subMenu

contour_detection.contour_detection.ContourDetection.subMenu

6.3.4.11 translator

 $\verb|contour_detection.contour_detection.ContourDetection.translator|\\$

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

· contour_detection.py

6.4 edge_detection.edge_detection.EdgeDetection Class Reference

QGIS Plugin Implementation.

Collaboration diagram for edge_detection.edge_detection.EdgeDetection:

```
edge_detection.edge
_detection.EdgeDetection
+ action
+ actions
+ arguments
+ dlg
+ first_start
+ iface
+ menu
+ output_dialog
+ plugin_dir
 subMenu
+ translator
   init ()
+ add action()
+ addToCustomMenu()
+ display_bands()
+ initGui()
+ run()
+ tr()
+ unload()
```

Public Member Functions

```
• def __init__ (self, iface)
```

Constructor.

def add_action (self, icon_path, text, callback, enabled_flag=True, add_to_menu=True, add_to_toolbar=True, status tip=None, whats this=None, parent=None)

Add a toolbar icon to the toolbar.

- def addToCustomMenu (self)
- def display_bands (self)
- def initGui (self)

Create the menu entries and toolbar icons inside the QGIS GUI.

• def run (self)

Run method that performs all the real work.

• def tr (self, message)

Get the translation for a string using Qt translation API.

• def unload (self)

Removes the plugin menu item and icon from QGIS GUI.

Public Attributes

- action
- · actions
- · arguments
- dlg
- first_start
- iface
- menu
- output_dialog
- plugin_dir
- subMenu
- · translator

6.4.1 Detailed Description

QGIS Plugin Implementation.

6.4.2 Constructor & Destructor Documentation

6.4.3 Member Function Documentation

6.4.3.1 add_action()

Add a toolbar icon to the toolbar.

```
:param icon_path: Path to the icon for this action. Can be a resource
   path (e.g. ':/plugins/foo/bar.png') or a normal file system path.
:type icon_path: str
:param text: Text that should be shown in menu items for this action.
:type text: str
:param callback: Function to be called when the action is triggered.
:type callback: function
:param enabled_flag: A flag indicating if the action should be enabled
   by default. Defaults to True.
:type enabled_flag: bool
:param add_to_menu: Flag indicating whether the action should also
   be added to the menu. Defaults to True.
:type add_to_menu: bool
:param add_to_toolbar: Flag indicating whether the action should also
   be added to the toolbar. Defaults to True.
:type add_to_toolbar: bool
:param status_tip: Optional text to show in a popup when mouse pointer
   hovers over the action.
:type status_tip: str
:param parent: Parent widget for the new action. Defaults None.
:type parent: QWidget
:param whats_this: Optional text to show in the status bar when the
   mouse pointer hovers over the action.
:returns: The action that was created. Note that the action is also
   added to self.actions list.
:rtype: QAction
```

Here is the call graph for this function:

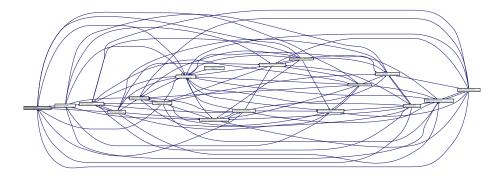
6.4.3.2 addToCustomMenu()

```
\label{lem:def_def} $\operatorname{def}_{\operatorname{edge\_detection.edge\_detection.eddToCustomMenu}}$ \ ( \\ \operatorname{self} \ )
```

6.4.3.3 display_bands()

```
\label{lem:def_def} $\operatorname{def}_{\operatorname{edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edge\_detection.edg
```

Here is the call graph for this function:

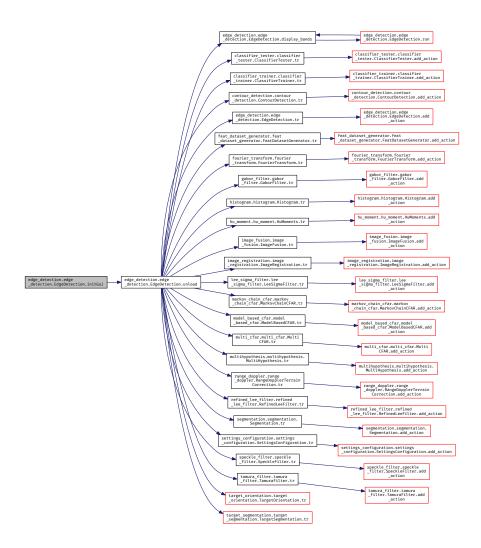


6.4.3.4 initGui()

```
\label{lem:def_def} \mbox{def edge\_detection.edge\_detection.EdgeDetection.initGui (} \\ self \mbox{)}
```

Create the menu entries and toolbar icons inside the QGIS GUI.

Here is the call graph for this function:

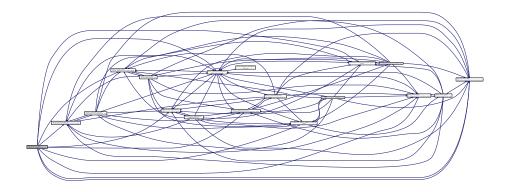


6.4.3.5 run()

```
\label{lem:def_def} $\operatorname{def} \operatorname{edge\_detection.EdgeDetection.run}$ \ ($\operatorname{\it self}$ )
```

Run method that performs all the real work.

Here is the call graph for this function:



6.4.3.6 tr()

```
def edge_detection.edge_detection.EdgeDetection.tr ( self, \\ message \ )
```

Get the translation for a string using Qt translation API.

```
We implement this ourselves since we do not inherit QObject.

:param message: String for translation.

:type message: str, QString

:returns: Translated version of message.

:rtype: QString
```

Here is the call graph for this function:

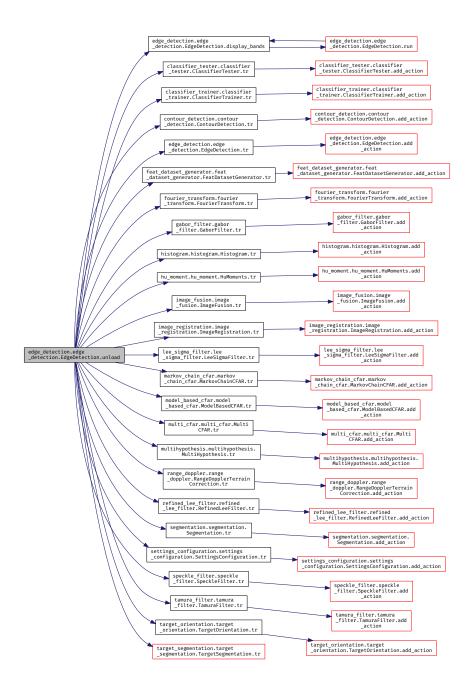


6.4.3.7 unload()

```
def edge_detection.edge_detection.EdgeDetection.unload ( self \ )
```

Removes the plugin menu item and icon from QGIS GUI.

Here is the call graph for this function:



6.4.4 Member Data Documentation

6.4.4.1 action

edge_detection.edge_detection.EdgeDetection.action

6.4.4.2 actions

 $\verb|edge_detection.edge_detection.EdgeDetection.actions|\\$

6.4.4.3 arguments

 $\verb|edge_detection.edge_detection.EdgeDetection.arguments|\\$

6.4.4.4 dlg

 $\verb|edge_detection.edge_detection.EdgeDetection.dlg|\\$

6.4.4.5 first_start

edge_detection.edge_detection.EdgeDetection.first_start

6.4.4.6 iface

 $\verb|edge_detection.edge_detection.EdgeDetection.if ace|\\$

6.4.4.7 menu

edge_detection.edge_detection.EdgeDetection.menu

6.4.4.8 output_dialog

 $\verb|edge_detection.edge_detection.EdgeDetection.output_dialog|\\$

6.4.4.9 plugin_dir

 $\verb|edge_detection.edge_detection.EdgeDetection.plugin_dir|\\$

6.4.4.10 subMenu

edge_detection.edge_detection.EdgeDetection.subMenu

6.4.4.11 translator

 $\verb|edge_detection.edge_detection.EdgeDetection.translator|\\$

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

· edge_detection.py

6.5 feat_dataset_generator.feat_dataset_generator.FeatDataset Generator Class Reference

QGIS Plugin Implementation.

 $Collaboration\ diagram\ for\ feat_dataset_generator. Feat\ Dataset\ Generator:$

```
feat_dataset_generator.feat
_dataset_generator.FeatDatasetGenerator
+ action
+ actions
+ arguments
+ dlg
+ first_start
+ iface
+ menu
+ output_dialog
+ plugin_dir
+ subMenu
+ translator
    init ()
+ add_action()
+ addToCustomMenu()
+ initGui()
+ run()
+ tr()
 unload()
```

Public Member Functions

```
• def __init__ (self, iface)
```

Constructor.

 def add_action (self, icon_path, text, callback, enabled_flag=True, add_to_menu=True, add_to_toolbar=True, status_tip=None, whats_this=None, parent=None)

Add a toolbar icon to the toolbar.

- def addToCustomMenu (self)
- def initGui (self)

Create the menu entries and toolbar icons inside the QGIS GUI.

• def run (self)

Run method that performs all the real work.

• def tr (self, message)

Get the translation for a string using Qt translation API.

• def unload (self)

Removes the plugin menu item and icon from QGIS GUI.

Public Attributes

- action
- · actions
- · arguments
- dlg
- · first start
- iface
- menu
- · output_dialog
- · plugin_dir
- subMenu
- translator

6.5.1 Detailed Description

QGIS Plugin Implementation.

6.5.2 Constructor & Destructor Documentation

6.5.3 Member Function Documentation

6.5.3.1 add_action()

Add a toolbar icon to the toolbar.

```
:param icon_path: Path to the icon for this action. Can be a resource
   path (e.g. ':/plugins/foo/bar.png') or a normal file system path.
:type icon_path: str
:param text: Text that should be shown in menu items for this action.
:type text: str
:param callback: Function to be called when the action is triggered.
:type callback: function
:param enabled_flag: A flag indicating if the action should be enabled
   by default. Defaults to True.
:type enabled_flag: bool
:param add_to_menu: Flag indicating whether the action should also
   be added to the menu. Defaults to True.
:type add_to_menu: bool
:param add\_to\_toolbar: Flag indicating whether the action should also
   be added to the toolbar. Defaults to True.
:type add_to_toolbar: bool
:param status_tip: Optional text to show in a popup when mouse pointer
   hovers over the action.
:type status_tip: str
:param parent: Parent widget for the new action. Defaults None.
:type parent: QWidget
:param whats_this: Optional text to show in the status bar when the
   mouse pointer hovers over the action.
:returns: The action that was created. Note that the action is also
   added to self.actions list.
:rtype: QAction
```

Here is the call graph for this function:

```
feat_dataset_generator.feat
_dataset_generator.FeatDatasetGenerator.add_action

feat_dataset_generator.FeatDatasetGenerator.add

ToCustomMenu
```

6.5.3.2 addToCustomMenu()

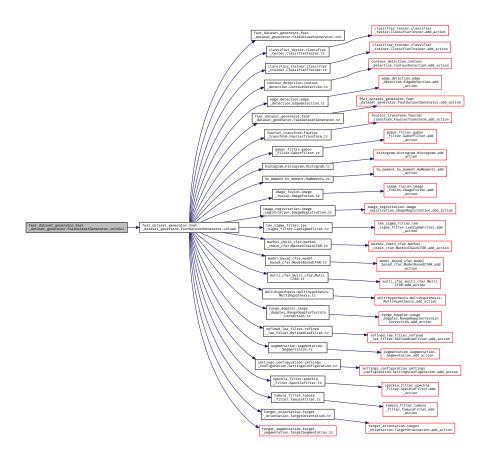
```
\label{lem:def_def} $$ \end{figure}$ $$ \end{figure}$ def feat_dataset_generator.FeatDatasetGenerator.addToCustomMenu ( $$ self ) $$
```

6.5.3.3 initGui()

```
def feat_dataset_generator.feat_dataset_generator.FeatDatasetGenerator.initGui ( self )
```

Create the menu entries and toolbar icons inside the QGIS GUI.

Here is the call graph for this function:



6.5.3.4 run()

```
def feat_dataset_generator.feat_dataset_generator.FeatDatasetGenerator.run ( self \ )
```

Run method that performs all the real work.

6.5.3.5 tr()

```
def feat_dataset_generator.feat_dataset_generator.FeatDatasetGenerator.tr ( self, \\ message \ )
```

Get the translation for a string using Qt translation API.

```
We implement this ourselves since we do not inherit QObject.

:param message: String for translation.

:type message: str, QString

:returns: Translated version of message.

:rtype: QString
```

Here is the call graph for this function:

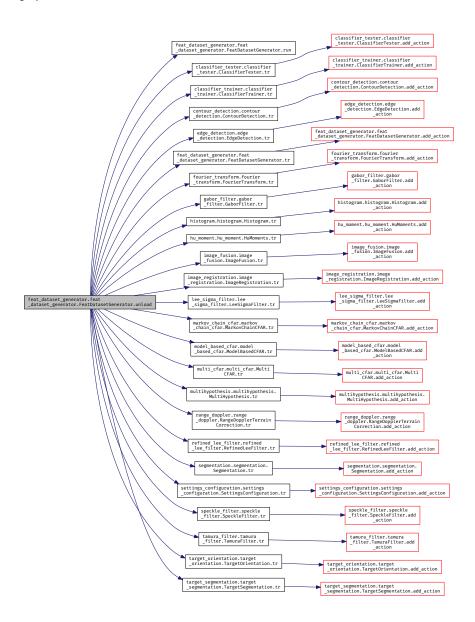


6.5.3.6 unload()

```
def feat_dataset_generator.feat_dataset_generator.FeatDatasetGenerator.unload ( self )
```

Removes the plugin menu item and icon from QGIS GUI.

Here is the call graph for this function:



6.5.4 Member Data Documentation

6.5.4.1 action

 $\verb|feat_dataset_generator.feat_dataset_generator.FeatDatasetGenerator.action| \\$

6.5.4.2 actions

 ${\tt feat_dataset_generator.feat_dataset_generator.FeatDatasetGenerator.actions}$

6.5.4.3 arguments

 ${\tt feat_dataset_generator.feat_dataset_generator.FeatDatasetGenerator.arguments}$

6.5.4.4 dlg

 ${\tt feat_dataset_generator.feat_dataset_generator.FeatDatasetGenerator.dlg}$

6.5.4.5 first_start

 ${\tt feat_dataset_generator.feat_dataset_generator.FeatDatasetGenerator.first_start}$

6.5.4.6 iface

 ${\tt feat_dataset_generator.feat_dataset_generator.FeatDatasetGenerator.if} acceleration {\tt dataset_generator.feat_dataset_generator.feat$

6.5.4.7 menu

 $\verb|feat_dataset_generator.feat_dataset_generator.FeatDatasetGenerator.menu|$

6.5.4.8 output_dialog

 ${\tt feat_dataset_generator.feat_dataset_generator.FeatDatasetGenerator.output_dialog}$

6.5.4.9 plugin_dir

 $\verb|feat_dataset_generator.feat_dataset_generator.FeatDatasetGenerator.plugin_dir|$

6.5.4.10 subMenu

 $\verb|feat_dataset_generator.feat_dataset_generator.FeatDatasetGenerator.subMenu|\\$

6.5.4.11 translator

 $\verb|feat_dataset_generator.feat_dataset_generator.FeatDatasetGenerator.translator|\\$

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

· feat_dataset_generator.py

6.6 fourier_transform.fourier_transform.FourierTransform Class Reference

QGIS Plugin Implementation.

Collaboration diagram for fourier_transform.fourier_transform.FourierTransform:

```
fourier_transform.fourier
_transform.FourierTransform
+ action
+ actions
+ arguments
+ dlg
 first_start
+ iface
 menu
 output_dialog
+ plugin_dir
+ subMenu
+ translator
    init ()
+ add_action()
+ addToCustomMenu()
+ display_bands()
+ initGui()
+ run()
+ tr()
+ unload()
```

Public Member Functions

def __init__ (self, iface)
 Constructor.

• def add_action (self, icon_path, text, callback, enabled_flag=True, add_to_menu=True, add_to_toolbar=True, status_tip=None, whats_this=None, parent=None)

Add a toolbar icon to the toolbar.

- def addToCustomMenu (self)
- def display_bands (self)
- def initGui (self)

Create the menu entries and toolbar icons inside the QGIS GUI.

• def run (self)

Run method that performs all the real work.

• def tr (self, message)

Get the translation for a string using Qt translation API.

def unload (self)

Removes the plugin menu item and icon from QGIS GUI.

Public Attributes

- action
- · actions
- · arguments
- dlg
- first_start
- iface
- menu
- output_dialog
- plugin_dir
- subMenu
- translator

6.6.1 Detailed Description

QGIS Plugin Implementation.

6.6.2 Constructor & Destructor Documentation

6.6.3 Member Function Documentation

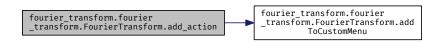
:type iface: QgsInterface

6.6.3.1 add_action()

Add a toolbar icon to the toolbar.

```
:param icon_path: Path to the icon for this action. Can be a resource
   path (e.g. ':/plugins/foo/bar.png') or a normal file system path.
:type icon_path: str
:param text: Text that should be shown in menu items for this action.
:type text: str
:param callback: Function to be called when the action is triggered.
:type callback: function
:param enabled_flag: A flag indicating if the action should be enabled
   by default. Defaults to True.
:type enabled_flag: bool
:param add_to_menu: Flag indicating whether the action should also
   be added to the menu. Defaults to True.
:type add_to_menu: bool
:param add_to_toolbar: Flag indicating whether the action should also
   be added to the toolbar. Defaults to True.
:type add_to_toolbar: bool
:param status_tip: Optional text to show in a popup when mouse pointer
   hovers over the action.
:type status_tip: str
:param parent: Parent widget for the new action. Defaults None.
:type parent: QWidget
:param whats_this: Optional text to show in the status bar when the
   mouse pointer hovers over the action.
:returns: The action that was created. Note that the action is also
   added to self.actions list.
:rtype: QAction
```

Here is the call graph for this function:



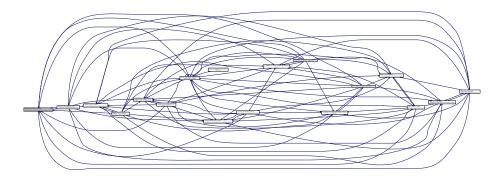
6.6.3.2 addToCustomMenu()

```
\label{lem:continuous} \mbox{def fourier\_transform.FourierTransform.addToCustomMenu (} \\ self \mbox{)}
```

6.6.3.3 display_bands()

```
def fourier_transform.fourier_transform.FourierTransform.display_bands ( self \ )
```

Here is the call graph for this function:

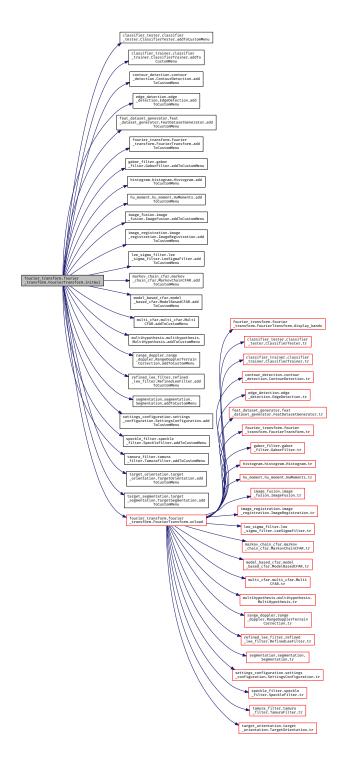


6.6.3.4 initGui()

```
def fourier_transform.fourier_transform.FourierTransform.initGui ( self \ )
```

Create the menu entries and toolbar icons inside the QGIS GUI.

Here is the call graph for this function:

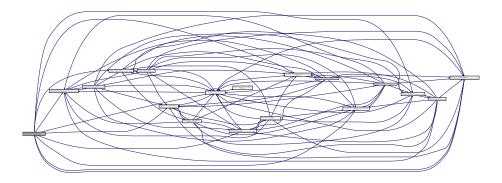


6.6.3.5 run()

```
def fourier_transform.fourier_transform.FourierTransform.run ( self \ )
```

Run method that performs all the real work.

Here is the call graph for this function:



6.6.3.6 tr()

Get the translation for a string using Qt translation API.

```
We implement this ourselves since we do not inherit QObject.

:param message: String for translation.

:type message: str, QString

:returns: Translated version of message.

:rtype: QString
```

Here is the call graph for this function:

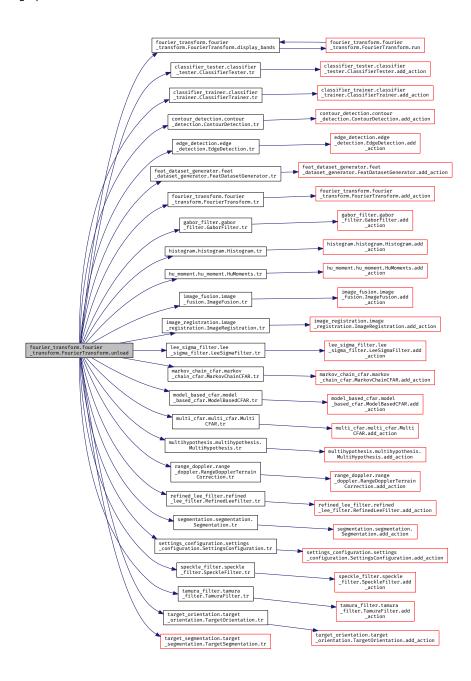


6.6.3.7 unload()

```
def fourier_transform.fourier_transform.FourierTransform.unload ( self \ )
```

Removes the plugin menu item and icon from QGIS GUI.

Here is the call graph for this function:



6.6.4 Member Data Documentation

6.6.4.1 action

 $fourier_transform.fourier_transform.FourierTransform.action$

6.6.4.2 actions

 $fourier_transform.fourier_transform.FourierTransform.actions$

6.6.4.3 arguments

fourier_transform.fourier_transform.FourierTransform.arguments

6.6.4.4 dlg

fourier_transform.fourier_transform.FourierTransform.dlg

6.6.4.5 first_start

 $four ier_transform.four ier_transform.Four ierTransform.first_start$

6.6.4.6 iface

fourier_transform.fourier_transform.FourierTransform.iface

6.6.4.7 menu

fourier_transform.fourier_transform.FourierTransform.menu

6.6.4.8 output_dialog

 $four ier_transform.four ier_transform.Four ierTransform.output_dialog$

6.6.4.9 plugin_dir

fourier_transform.fourier_transform.FourierTransform.plugin_dir

6.6.4.10 subMenu

fourier_transform.fourier_transform.FourierTransform.subMenu

6.6.4.11 translator

fourier_transform.fourier_transform.FourierTransform.translator

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

fourier_transform.py

6.7 gabor_filter.gabor_filter.GaborFilter Class Reference

QGIS Plugin Implementation.

Collaboration diagram for gabor_filter.gabor_filter.GaborFilter:

```
gabor_filter.gabor
_filter.GaborFilter
+ action
+ actions
+ arguments
+ dlg
+ first_start
+ iface
+ menu
+ output_dialog
+ plugin_dir
+ subMenu
+ translator
    init ()
+ add_action()
+ addToCustomMenu()
+ display_bands()
+ initGui()
+ run()
+ tr()
+ unload()
```

Public Member Functions

• def __init__ (self, iface)

Constructor.

 def add_action (self, icon_path, text, callback, enabled_flag=True, add_to_menu=True, add_to_toolbar=True, status_tip=None, whats_this=None, parent=None)

Add a toolbar icon to the toolbar.

- def addToCustomMenu (self)
- def display_bands (self)
- def initGui (self)

Create the menu entries and toolbar icons inside the QGIS GUI.

• def run (self)

Run method that performs all the real work.

• def tr (self, message)

Get the translation for a string using Qt translation API.

• def unload (self)

Removes the plugin menu item and icon from QGIS GUI.

Public Attributes

- · action
- · actions
- · arguments
- dlg
- · first start
- iface
- menu
- output_dialog
- plugin dir
- subMenu
- · translator

6.7.1 Detailed Description

QGIS Plugin Implementation.

6.7.2 Constructor & Destructor Documentation

```
:param iface: An interface instance that will be passed to this class
   which provides the hook by which you can manipulate the QGIS
   application at run time.
:type iface: QgsInterface
```

6.7.3 Member Function Documentation

6.7.3.1 add_action()

Add a toolbar icon to the toolbar.

```
:param icon_path: Path to the icon for this action. Can be a resource
   path (e.g. ':/plugins/foo/bar.png') or a normal file system path.
:type icon_path: str
:param text: Text that should be shown in menu items for this action.
:type text: str
:param callback: Function to be called when the action is triggered.
:type callback: function
:param enabled_flag: A flag indicating if the action should be enabled
   by default. Defaults to True.
:type enabled_flag: bool
:param add_to_menu: Flag indicating whether the action should also
   be added to the menu. Defaults to True.
:type add_to_menu: bool
:param add_to_toolbar: Flag indicating whether the action should also
   be added to the toolbar. Defaults to True.
:type add_to_toolbar: bool
:param status_tip: Optional text to show in a popup when mouse pointer
   hovers over the action.
:type status_tip: str
:param parent: Parent widget for the new action. Defaults None.
:type parent: QWidget
:param whats_this: Optional text to show in the status bar when the
   mouse pointer hovers over the action.
:returns: The action that was created. Note that the action is also
   added to self.actions list.
:rtype: QAction
```

Here is the call graph for this function:



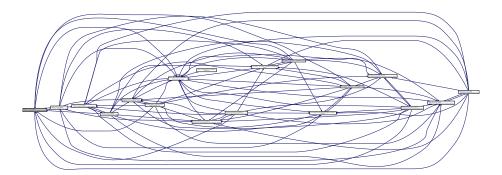
6.7.3.2 addToCustomMenu()

```
\label{lem:gabor_filter.gabor_filter.addToCustomMenu} \mbox{ (} \\ self \mbox{ )}
```

6.7.3.3 display_bands()

```
\label{lem:gabor_filter.gabor_filter.GaborFilter.display\_bands (} self \ )
```

Here is the call graph for this function:

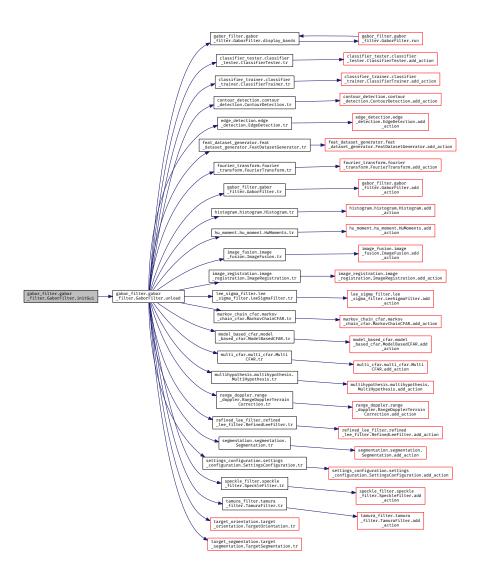


6.7.3.4 initGui()

```
\label{lem:gabor_filter.gabor_filter.GaborFilter.initGui (} self \ )
```

Create the menu entries and toolbar icons inside the QGIS GUI.

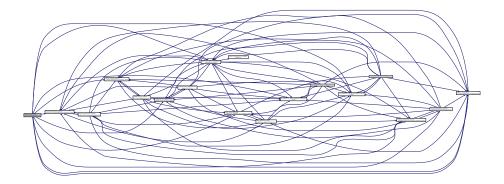
Here is the call graph for this function:



6.7.3.5 run()

Run method that performs all the real work.

Here is the call graph for this function:



6.7.3.6 tr()

Get the translation for a string using Qt translation API.

```
We implement this ourselves since we do not inherit QObject.

:param message: String for translation.

:type message: str, QString

:returns: Translated version of message.

:rtype: QString
```

Here is the call graph for this function:

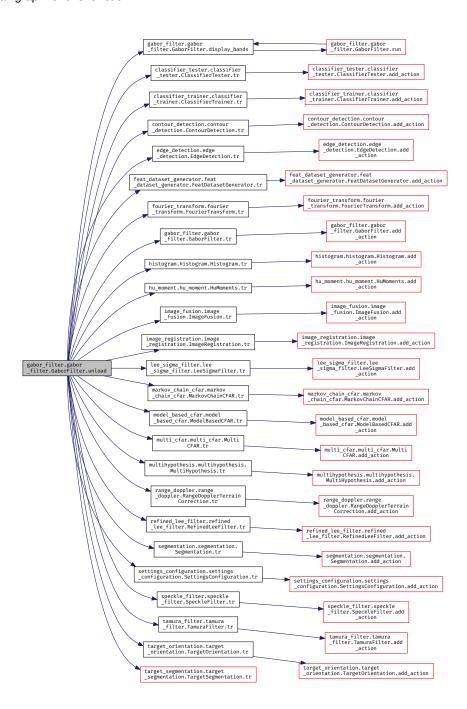


6.7.3.7 unload()

```
\label{lem:gabor_filter.gabor_filter.gaborFilter.unload (} self \ )
```

Removes the plugin menu item and icon from QGIS GUI.

Here is the call graph for this function:



6.7.4 Member Data Documentation

6.7.4.1 action

gabor_filter.gabor_filter.GaborFilter.action

6.7.4.2 actions

gabor_filter.gabor_filter.GaborFilter.actions

6.7.4.3 arguments

 ${\tt gabor_filter.gabor_filter.GaborFilter.arguments}$

6.7.4.4 dlg

gabor_filter.gabor_filter.GaborFilter.dlg

6.7.4.5 first_start

gabor_filter.gabor_filter.GaborFilter.first_start

6.7.4.6 iface

 ${\tt gabor_filter.gabor_filter.GaborFilter.if} ace$

6.7.4.7 menu

gabor_filter.gabor_filter.GaborFilter.menu

6.7.4.8 output_dialog

gabor_filter.gabor_filter.GaborFilter.output_dialog

6.7.4.9 plugin_dir

 ${\tt gabor_filter.gabor_filter.GaborFilter.plugin_dir}$

6.7.4.10 subMenu

```
{\tt gabor\_filter.gabor\_filter.GaborFilter.subMenu}
```

6.7.4.11 translator

```
gabor_filter.gabor_filter.GaborFilter.translator
```

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

gabor_filter.py

6.8 histogram.histogram.Histogram Class Reference

QGIS Plugin Implementation.

Collaboration diagram for histogram.histogram.Histogram:

```
histogram.histogram.Histogram
+ action
+ actions
+ arguments
+ dlg
+ first_start
+ iface
+ menu
+ output_dialog
+ plugin_dir
+ subMenu
+ translator
+ init ()
+ add_action()
+ addToCustomMenu()
+ display_bands()
+ initGui()
+ run()
+ tr()
+ unload()
```

Public Member Functions

• def __init__ (self, iface)

Constructor.

• def add_action (self, icon_path, text, callback, enabled_flag=True, add_to_menu=True, add_to_toolbar=True, status_tip=None, whats_this=None, parent=None)

Add a toolbar icon to the toolbar.

- def addToCustomMenu (self)
- def display_bands (self)
- def initGui (self)

Create the menu entries and toolbar icons inside the QGIS GUI.

• def run (self)

Run method that performs all the real work.

• def tr (self, message)

Get the translation for a string using Qt translation API.

• def unload (self)

Removes the plugin menu item and icon from QGIS GUI.

Public Attributes

- action
- · actions
- · arguments
- dlg
- · first start
- iface
- menu
- output_dialog
- plugin_dir
- subMenu
- · translator

6.8.1 Detailed Description

QGIS Plugin Implementation.

6.8.2 Constructor & Destructor Documentation

6.8.3 Member Function Documentation

6.8.3.1 add action()

Add a toolbar icon to the toolbar.

```
:param icon_path: Path to the icon for this action. Can be a resource
   path (e.g. ':/plugins/foo/bar.png') or a normal file system path.
:type icon_path: str
:param text: Text that should be shown in menu items for this action.
:tvpe text: str
:param callback: Function to be called when the action is triggered.
:type callback: function
:param enabled_flag: A flag indicating if the action should be enabled
   by default. Defaults to True.
:type enabled_flag: bool
:param add_to_menu: Flag indicating whether the action should also
   be added to the menu. Defaults to True.
:type add_to_menu: bool
:param add_to_toolbar: Flag indicating whether the action should also
   be added to the toolbar. Defaults to True.
:type add_to_toolbar: bool
:param status_tip: Optional text to show in a popup when mouse pointer
   hovers over the action.
:type status_tip: str
:param parent: Parent widget for the new action. Defaults None.
:type parent: QWidget
:param whats_this: Optional text to show in the status bar when the
   mouse pointer hovers over the action.
:returns: The action that was created. Note that the action is also
   added to self.actions list.
:rtype: QAction
```

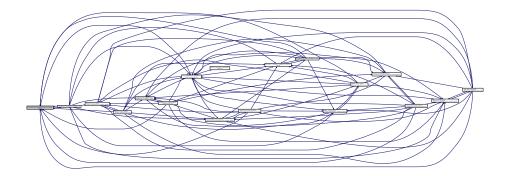


6.8.3.2 addToCustomMenu()

```
\label{eq:continuous} \mbox{def histogram.histogram.Histogram.addToCustomMenu (} \\ self \mbox{)}
```

6.8.3.3 display_bands()

Here is the call graph for this function:

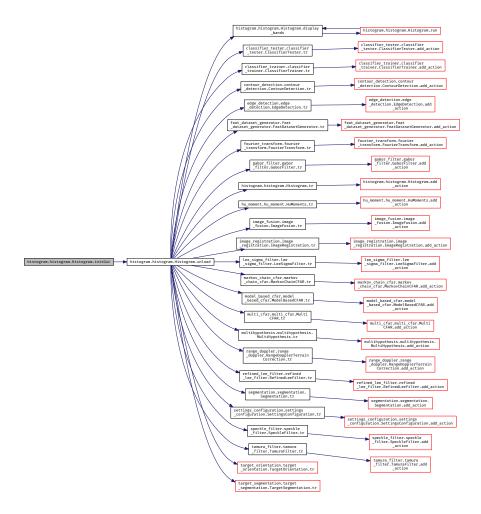


6.8.3.4 initGui()

```
\label{eq:continuity} \mbox{def histogram.histogram.Histogram.initGui (} \\ self \mbox{)}
```

Create the menu entries and toolbar icons inside the QGIS GUI.

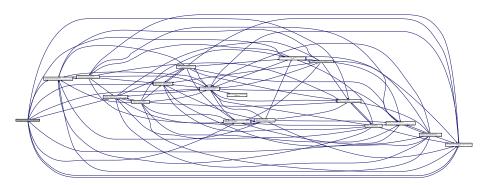
Here is the call graph for this function:



6.8.3.5 run()

```
\operatorname{def} histogram.histogram.Histogram.run ( \operatorname{\mathit{self}} )
```

Run method that performs all the real work.



6.8.3.6 tr()

Get the translation for a string using Qt translation API.

```
We implement this ourselves since we do not inherit QObject.

:param message: String for translation.

:type message: str, QString

:returns: Translated version of message.

:rtype: QString
```

Here is the call graph for this function:

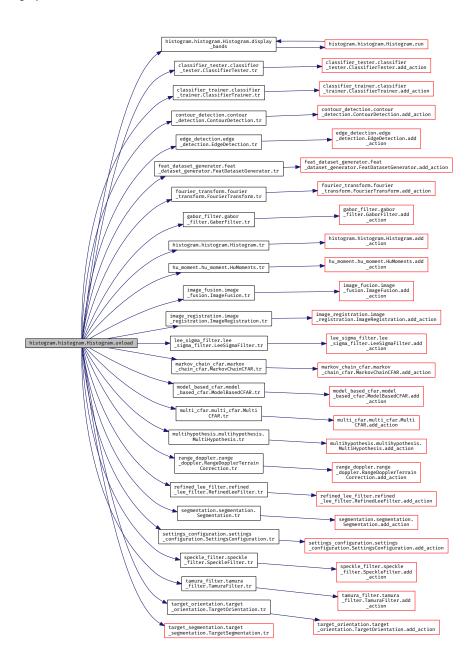


6.8.3.7 unload()

```
\label{eq:continuous} \mbox{def histogram.histogram.unload (} \\ self \mbox{)}
```

Removes the plugin menu item and icon from QGIS GUI.

Here is the call graph for this function:



6.8.4 Member Data Documentation

6.8.4.1 action

histogram.histogram.Histogram.action

6.8.4.2 actions

histogram.histogram.Histogram.actions

6.8.4.3 arguments

 $\verb|histogram.histogram.Histogram.arguments||$

6.8.4.4 dlg

histogram.histogram.Histogram.dlg

6.8.4.5 first_start

histogram.histogram.Histogram.first_start

6.8.4.6 iface

histogram.histogram.Histogram.iface

6.8.4.7 menu

histogram.histogram.Histogram.menu

6.8.4.8 output_dialog

 $\verb|histogram.histogram.Histogram.output_dialog|\\$

6.8.4.9 plugin_dir

histogram.histogram.Histogram.plugin_dir

6.8.4.10 subMenu

histogram.histogram.Histogram.subMenu

6.8.4.11 translator

histogram.histogram.Histogram.translator

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

histogram.py

6.9 hu moment.hu moment.HuMoments Class Reference

QGIS Plugin Implementation.

Collaboration diagram for hu_moment.hu_moment.HuMoments:

```
hu_moment.hu_moment.HuMoments
+ action
+ actions
+ arguments
+ dlg
+ first_start
+ iface
+ menu
+ output_dialog
+ plugin_dir
+ subMenu
+ translator
+ init ()
+ add_action()
+ addToCustomMenu()
+ display_bands()
+ initGui()
+ run()
+ tr()
+ unload()
```

Public Member Functions

• def __init__ (self, iface)

Constructor.

 def add_action (self, icon_path, text, callback, enabled_flag=True, add_to_menu=True, add_to_toolbar=True, status_tip=None, whats_this=None, parent=None)

Add a toolbar icon to the toolbar.

- def addToCustomMenu (self)
- def display_bands (self)
- def initGui (self)

Create the menu entries and toolbar icons inside the QGIS GUI.

• def run (self)

Run method that performs all the real work.

• def tr (self, message)

Get the translation for a string using Qt translation API.

• def unload (self)

Removes the plugin menu item and icon from QGIS GUI.

Public Attributes

- action
- · actions
- · arguments
- dlg
- · first start
- iface
- menu
- output_dialog
- plugin dir
- subMenu
- · translator

6.9.1 Detailed Description

QGIS Plugin Implementation.

6.9.2 Constructor & Destructor Documentation

```
:param iface: An interface instance that will be passed to this class
   which provides the hook by which you can manipulate the QGIS
   application at run time.
:type iface: QgsInterface
```

6.9.3 Member Function Documentation

6.9.3.1 add action()

Add a toolbar icon to the toolbar.

```
:param icon_path: Path to the icon for this action. Can be a resource
   path (e.g. ':/plugins/foo/bar.png') or a normal file system path.
:type icon_path: str
:param text: Text that should be shown in menu items for this action.
:tvpe text: str
:param callback: Function to be called when the action is triggered.
:type callback: function
:param enabled_flag: A flag indicating if the action should be enabled
   by default. Defaults to True.
:type enabled_flag: bool
:param add_to_menu: Flag indicating whether the action should also
   be added to the menu. Defaults to True.
:type add_to_menu: bool
:param add_to_toolbar: Flag indicating whether the action should also
   be added to the toolbar. Defaults to True.
:type add_to_toolbar: bool
:param status_tip: Optional text to show in a popup when mouse pointer
   hovers over the action.
:type status_tip: str
:param parent: Parent widget for the new action. Defaults None.
:type parent: QWidget
:param whats_this: Optional text to show in the status bar when the
   mouse pointer hovers over the action.
:returns: The action that was created. Note that the action is also
   added to self.actions list.
:rtype: QAction
```



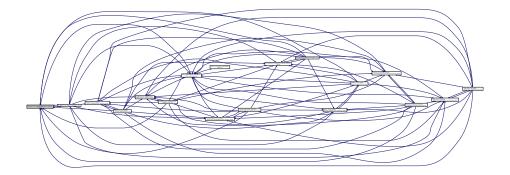
6.9.3.2 addToCustomMenu()

```
\label{lem:condition} \mbox{def hu\_moment.hu\_moment.HuMoments.addToCustomMenu (} \\ self \mbox{)}
```

6.9.3.3 display_bands()

```
\label{lem:continuity} \mbox{def hu\_moment.hu\_moment.HuMoments.display\_bands (} \\ self \mbox{)}
```

Here is the call graph for this function:

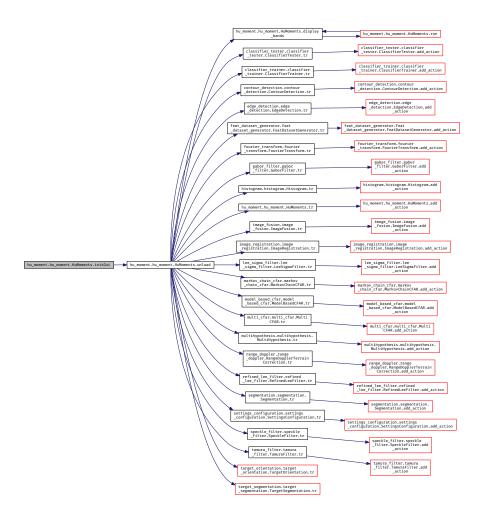


6.9.3.4 initGui()

```
\label{lem:continuity} \mbox{def hu\_moment.hu\_moment.HuMoments.initGui (} \\ self \mbox{)}
```

Create the menu entries and toolbar icons inside the QGIS GUI.

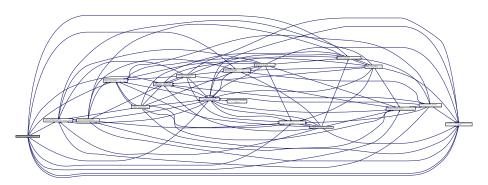
Here is the call graph for this function:



6.9.3.5 run()

```
def hu_moment.hu_moment.HuMoments.run ( self )
```

Run method that performs all the real work.



6.9.3.6 tr()

Get the translation for a string using Qt translation API.

```
We implement this ourselves since we do not inherit QObject.

:param message: String for translation.

:type message: str, QString

:returns: Translated version of message.

:rtype: QString
```

Here is the call graph for this function:

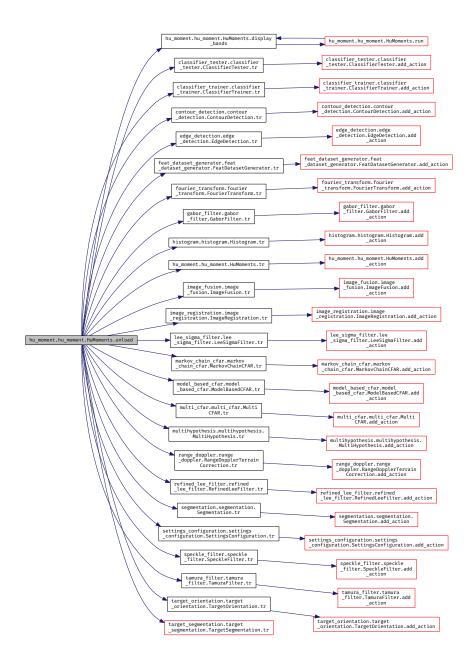


6.9.3.7 unload()

```
\label{lem:continuity} \mbox{def hu\_moment.hu\_moment.HuMoments.unload (} \\ self \mbox{)}
```

Removes the plugin menu item and icon from QGIS GUI.

Here is the call graph for this function:



6.9.4 Member Data Documentation

6.9.4.1 action

hu_moment.hu_moment.HuMoments.action

6.9.4.2 actions

hu_moment.hu_moment.HuMoments.actions

6.9.4.3 arguments

 $\verb|hu_moment.hu_moment.HuMoments.arguments|\\$

6.9.4.4 dlg

hu_moment.hu_moment.HuMoments.dlg

6.9.4.5 first_start

hu_moment.hu_moment.HuMoments.first_start

6.9.4.6 iface

hu_moment.hu_moment.HuMoments.iface

6.9.4.7 menu

hu_moment.hu_moment.HuMoments.menu

6.9.4.8 output_dialog

hu_moment.hu_moment.HuMoments.output_dialog

6.9.4.9 plugin_dir

hu_moment.hu_moment.HuMoments.plugin_dir

6.9.4.10 subMenu

hu_moment.hu_moment.HuMoments.subMenu

6.9.4.11 translator

hu_moment.hu_moment.HuMoments.translator

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

· hu_moment.py

6.10 image_fusion.image_fusion.lmageFusion Class Reference

QGIS Plugin Implementation.

Collaboration diagram for image_fusion.image_fusion.ImageFusion:

```
image_fusion.image
_fusion.ImageFusion
+ action
+ actions
+ arguments
+ dlg
+ first_start
+ iface
+ menu
+ output_dialog
+ plugin_dir
+ subMenu
+ translator
   init ()
+ add action()
+ addToCustomMenu()
+ initGui()
+ run()
+ tr()
+ unload()
```

Public Member Functions

• def __init__ (self, iface)

Constructor.

 def add_action (self, icon_path, text, callback, enabled_flag=True, add_to_menu=True, add_to_toolbar=True, status_tip=None, whats_this=None, parent=None)

Add a toolbar icon to the toolbar.

- def addToCustomMenu (self)
- def initGui (self)

Create the menu entries and toolbar icons inside the QGIS GUI.

• def run (self)

Run method that performs all the real work.

• def tr (self, message)

Get the translation for a string using Qt translation API.

• def unload (self)

Removes the plugin menu item and icon from QGIS GUI.

Public Attributes

- action
- · actions
- · arguments
- dlg
- first_start
- iface
- menu
- · output_dialog
- · plugin_dir
- subMenu
- translator

6.10.1 Detailed Description

QGIS Plugin Implementation.

6.10.2 Constructor & Destructor Documentation

```
:param iface: An interface instance that will be passed to this class
   which provides the hook by which you can manipulate the QGIS
   application at run time.
:type iface: QgsInterface
```

6.10.3 Member Function Documentation

6.10.3.1 add_action()

Add a toolbar icon to the toolbar.

```
:param icon_path: Path to the icon for this action. Can be a resource
   path (e.g. ':/plugins/foo/bar.png') or a normal file system path.
:type icon_path: str
:param text: Text that should be shown in menu items for this action.
:type text: str
:param callback: Function to be called when the action is triggered.
:type callback: function
:param enabled_flag: A flag indicating if the action should be enabled
   by default. Defaults to True.
:type enabled_flag: bool
:param add_to_menu: Flag indicating whether the action should also
   be added to the menu. Defaults to True.
:type add_to_menu: bool
:param add_to_toolbar: Flag indicating whether the action should also
   be added to the toolbar. Defaults to True.
:type add_to_toolbar: bool
:param status_tip: Optional text to show in a popup when mouse pointer
   hovers over the action.
:type status_tip: str
:param parent: Parent widget for the new action. Defaults None.
:type parent: QWidget
:param whats_this: Optional text to show in the status bar when the
   mouse pointer hovers over the action.
:returns: The action that was created. Note that the action is also
   added to self.actions list.
:rtype: QAction
```



6.10.3.2 addToCustomMenu()

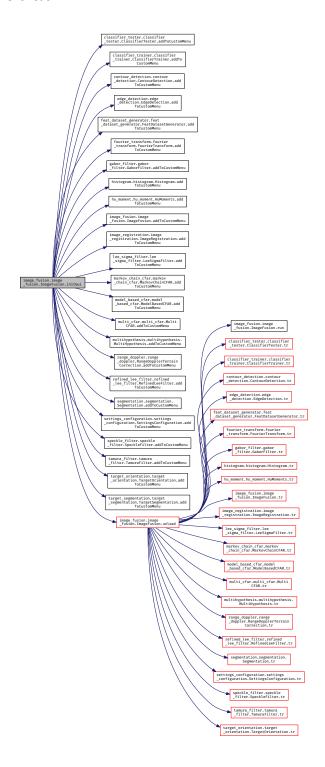
```
\label{lem:def_def} \mbox{def image\_fusion.imageFusion.addToCustomMenu (} \\ self \mbox{)}
```

6.10.3.3 initGui()

```
\label{lem:continuous} \mbox{def image\_fusion.imageFusion.imitGui (} \\ self \mbox{)}
```

Create the menu entries and toolbar icons inside the QGIS GUI.

Here is the call graph for this function:



6.10.3.4 run()

```
\label{lem:def:mage_fusion.} $$ \ensuremath{\mathsf{ImageFusion.run}}$ ($$ \ensuremath{\mathsf{self}}$ )
```

Run method that performs all the real work.

6.10.3.5 tr()

Get the translation for a string using Qt translation API.

```
We implement this ourselves since we do not inherit QObject.

:param message: String for translation.

:type message: str, QString

:returns: Translated version of message.

:rtype: QString
```

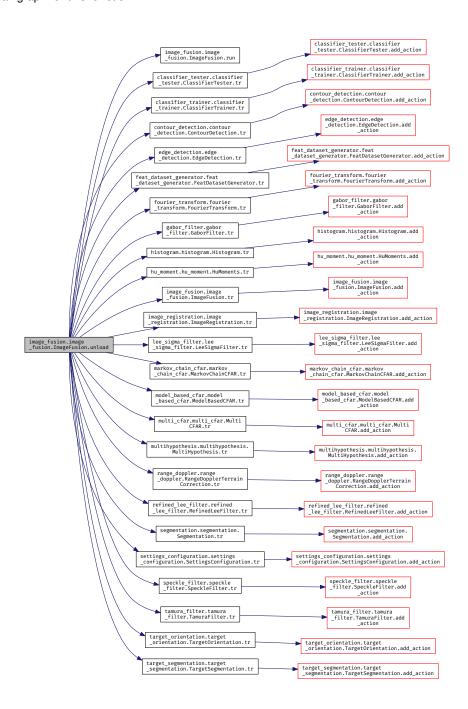
Here is the call graph for this function:



6.10.3.6 unload()

Removes the plugin menu item and icon from QGIS GUI.

Here is the call graph for this function:



6.10.4 Member Data Documentation

6.10.4.1 action

image_fusion.image_fusion.ImageFusion.action

6.10.4.2 actions

 $\verb|image_fusion.image_fusion.ImageFusion.actions|\\$

6.10.4.3 arguments

 $\verb|image_fusion.image_fusion.ImageFusion.arguments|\\$

6.10.4.4 dlg

image_fusion.image_fusion.ImageFusion.dlg

6.10.4.5 first_start

image_fusion.image_fusion.ImageFusion.first_start

6.10.4.6 iface

image_fusion.image_fusion.ImageFusion.iface

6.10.4.7 menu

image_fusion.image_fusion.ImageFusion.menu

6.10.4.8 output_dialog

 $\verb|image_fusion.image_fusion.ImageFusion.output_dialog|\\$

6.10.4.9 plugin_dir

 $\verb|image_fusion.image_fusion.ImageFusion.plugin_dir|\\$

6.10.4.10 subMenu

image_fusion.image_fusion.ImageFusion.subMenu

6.10.4.11 translator

image_fusion.image_fusion.ImageFusion.translator

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

· image_fusion.py

6.11 image_registration.image_registration.lmageRegistration Class Reference

QGIS Plugin Implementation.

Collaboration diagram for image_registration.image_registration.ImageRegistration:

```
image_registration.image
_registration.ImageRegistration
+ action
+ actions
+ arguments
+ configContents
+ dlg
+ featureImagePairs
+ first_start
+ iface
+ menu
+ output_dialog
+ plugin_dir
+ scalingPairs
+ translator
+ __init__()
+ add_action()
+ addToCustomMenu()
+ featureImageAdd()
+ featureImageDelete()
+ initGui()
+ pageChange()
+ run()
+ scalingAdd()
+ scalingDelete()
+ tr()
+ unload()
```

Public Member Functions

- def __init__ (self, iface)
- def add_action (self, icon_path, text, callback, enabled_flag=True, add_to_menu=True, add_to_toolbar=True, status_tip=None, whats_this=None, parent=None)
- def addToCustomMenu (self)
- def featureImageAdd (self)
- def featureImageDelete (self)
- def initGui (self)

Create the menu entries and toolbar icons inside the QGIS GUI.

- def pageChange (self, pagesToChange)
- def run (self)

Run method that performs all the real work.

- def scalingAdd (self)
- def scalingDelete (self)
- def tr (self, message)
- def unload (self)

Removes the plugin menu item and icon from QGIS GUI.

Public Attributes

- action
- · actions
- arguments
- configContents
- dlg
- featureImagePairs
- first_start
- iface
- menu
- output_dialog
- plugin dir
- scalingPairs
- translator

6.11.1 Detailed Description

QGIS Plugin Implementation.

6.11.2 Constructor & Destructor Documentation

6.11.3 Member Function Documentation

6.11.3.1 add_action()

Here is the call graph for this function:

```
image_registration.image
_registration.ImageRegistration.add
_action
image_registration.image
_registration.imageRegistration.add
_ToCustomMenu
```

6.11.3.2 addToCustomMenu()

```
\label{lem:def_mage_registration} \mbox{\tt lmageRegistration.addToCustomMenu} \mbox{\tt (} \\ self \mbox{\tt )}
```

6.11.3.3 featureImageAdd()

```
\label{lem:def_mage_registration} \mbox{\tt lmage_registration.lmageRegistration.featureImageAdd (} \\ self \mbox{\tt )}
```



6.11.3.4 featureImageDelete()

```
def image_registration.image_registration.ImageRegistration.featureImageDelete ( self )
```

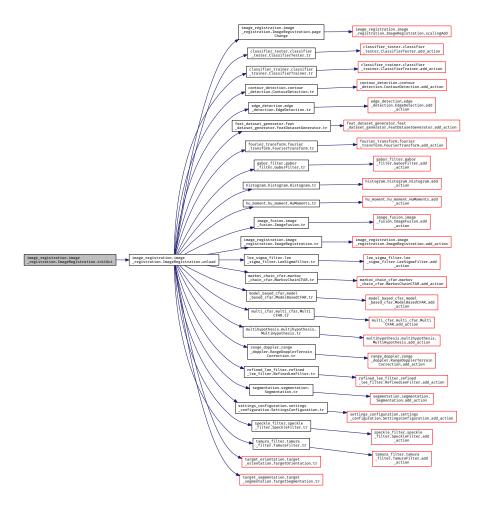
Here is the call graph for this function:



6.11.3.5 initGui()

```
def image_registration.image_registration.ImageRegistration.initGui ( self \ )
```

Create the menu entries and toolbar icons inside the QGIS GUI.



6.11.3.6 pageChange()

```
def image_registration.image_registration.ImageRegistration.pageChange ( self, \\ pagesToChange \ )
```

Here is the call graph for this function:



6.11.3.7 run()

```
def image_registration.image_registration.ImageRegistration.run ( self )
```

Run method that performs all the real work.

Here is the call graph for this function:



6.11.3.8 scalingAdd()

```
def image_registration.image_registration.ImageRegistration.scalingAdd ( self \ )
```

Here is the call graph for this function:



6.11.3.9 scalingDelete()

```
def image_registration.image_registration.ImageRegistration.scalingDelete ( self \ )
```



6.11.3.10 tr()

```
def image_registration.image_registration.ImageRegistration.tr ( self, \\ message \ )
```

Here is the call graph for this function:

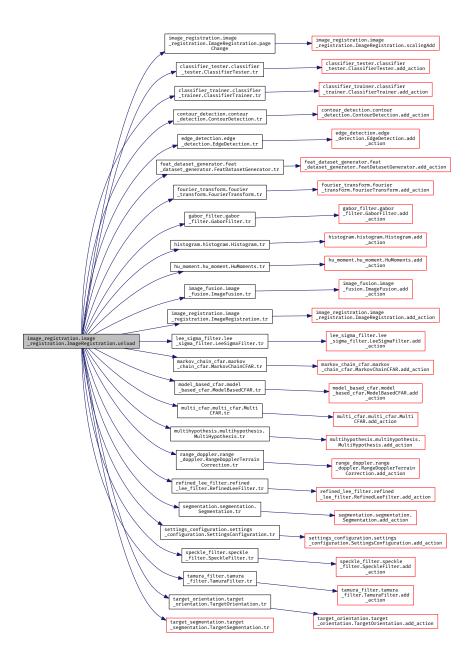


6.11.3.11 unload()

```
def image_registration.image_registration.ImageRegistration.unload ( self \ )
```

Removes the plugin menu item and icon from QGIS GUI.

Here is the call graph for this function:



6.11.4 Member Data Documentation

6.11.4.1 action

image_registration.image_registration.ImageRegistration.action

6.11.4.2 actions

 $\verb|image_registration.image_registration.ImageRegistration.actions|\\$

6.11.4.3 arguments

 $\verb|image_registration.image_registration.ImageRegistration.arguments|$

6.11.4.4 configContents

 $\verb|image_reg| is tration.image_reg| is tration.ImageReg| is tration.configContents$

6.11.4.5 dlg

image_registration.image_registration.ImageRegistration.dlg

6.11.4.6 featureImagePairs

 $\verb|image_registration.image_registration.ImageRegistration.featureImagePairs|$

6.11.4.7 first start

image_registration.image_registration.ImageRegistration.first_start

6.11.4.8 iface

 $\verb|image_registration.image_registration.ImageRegistration.if ace|\\$

6.11.4.9 menu

 $\verb|image_registration.image_registration.ImageRegistration.menu|\\$

6.11.4.10 output_dialog

 $\verb|image_registration.image_registration.ImageRegistration.output_dialog| \\$

6.11.4.11 plugin_dir

image_registration.image_registration.ImageRegistration.plugin_dir

6.11.4.12 scalingPairs

 $\verb|image_registration.image_registration.ImageRegistration.scalingPairs|$

6.11.4.13 translator

 $\verb|image_registration.image_registration.ImageRegistration.translator|\\$

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

• image_registration.py

6.12 lee_sigma_filter.lee_sigma_filter.LeeSigmaFilter Class Reference

QGIS Plugin Implementation.

Collaboration diagram for lee_sigma_filter.lee_sigma_filter.LeeSigmaFilter:

```
lee_sigma_filter.lee
_sigma_filter.LeeSigmaFilter
+ action
+ actions
+ arguments
+ dlg
+ first_start
+ iface
+ menu
+ output_dialog
+ plugin_dir
+ subMenu
+ translator
    init ()
+ add_action()
+ addToCustomMenu()
+ initGui()
+ run()
+ tr()
+ unload()
```

Public Member Functions

- def __init__ (self, iface)
- def add_action (self, icon_path, text, callback, enabled_flag=True, add_to_menu=True, add_to_toolbar=True, status_tip=None, whats_this=None, parent=None)

Add a toolbar icon to the toolbar.

- def addToCustomMenu (self)
- def initGui (self)
- def run (self)
- def tr (self, message)
- def unload (self)

Public Attributes

- action
- · actions
- · arguments
- dlg
- first_start
- iface
- men
- output_dialog
- · plugin_dir
- subMenu
- · translator

6.12.1 Detailed Description

QGIS Plugin Implementation.

6.12.2 Constructor & Destructor Documentation

6.12.3 Member Function Documentation

6.12.3.1 add_action()

Add a toolbar icon to the toolbar.

```
:param icon_path: Path to the icon for this action. Can be a resource
    path (e.g. ':/plugins/foo/bar.png') or a normal file system path.
:type icon_path: str

:param text: Text that should be shown in menu items for this action.
:type text: str

:param callback: Function to be called when the action is triggered.
:type callback: function

:param enabled_flag: A flag indicating if the action should be enabled
    by default. Defaults to True.
:type enabled_flag: bool

:param add_to_menu: Flag indicating whether the action should also
    be added to the menu. Defaults to True.
:type add_to_menu: bool

:param add_to_toolbar: Flag indicating whether the action should also
    be added to the toolbar. Defaults to True.
```

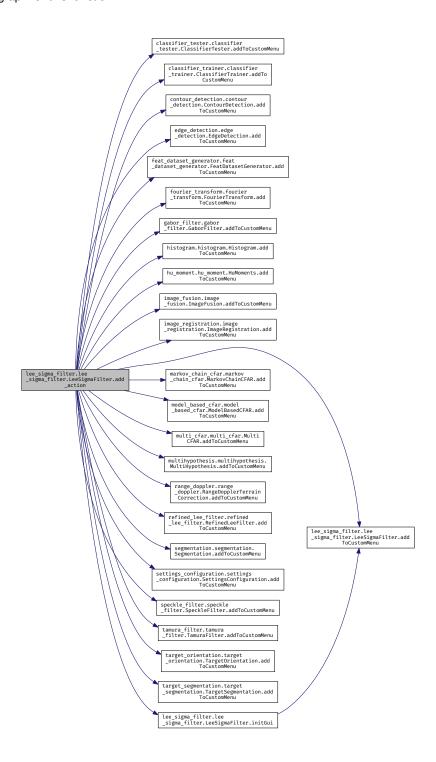
```
:type add_to_toolbar: bool
:param status_tip: Optional text to show in a popup when mouse pointer
   hovers over the action.
:type status_tip: str

:param parent: Parent widget for the new action. Defaults None.
:type parent: QWidget

:param whats_this: Optional text to show in the status bar when the
   mouse pointer hovers over the action.

:returns: The action that was created. Note that the action is also
   added to self.actions list.
:rtype: QAction
```

Here is the call graph for this function:



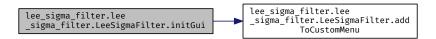
6.12.3.2 addToCustomMenu()

```
def lee_sigma_filter.lee_sigma_filter.LeeSigmaFilter.addToCustomMenu ( self \ )
```

6.12.3.3 initGui()

```
def lee_sigma_filter.lee_sigma_filter.LeeSigmaFilter.initGui ( self \ )
```

Here is the call graph for this function:

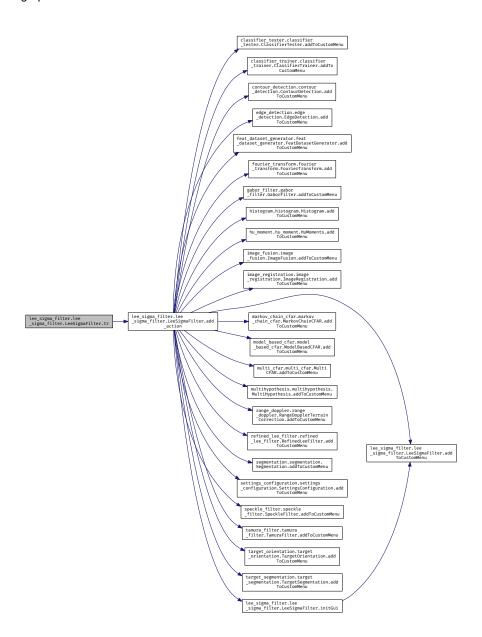


6.12.3.4 run()

```
\label{leesigma} \mbox{\tt def lee\_sigma\_filter.leeSigmaFilter.run (} \\ self \mbox{\tt )}
```

6.12.3.5 tr()

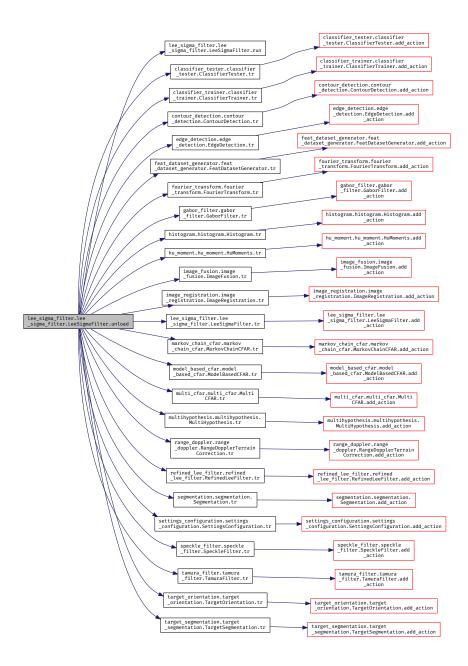
Here is the call graph for this function:



6.12.3.6 unload()

```
def lee_sigma_filter.lee_sigma_filter.LeeSigmaFilter.unload ( self \ )
```

Here is the call graph for this function:



6.12.4 Member Data Documentation

6.12.4.1 action

lee_sigma_filter.lee_sigma_filter.LeeSigmaFilter.action

6.12.4.2 actions

lee_sigma_filter.lee_sigma_filter.LeeSigmaFilter.actions

6.12.4.3 arguments

lee_sigma_filter.lee_sigma_filter.LeeSigmaFilter.arguments

6.12.4.4 dlg

lee_sigma_filter.lee_sigma_filter.LeeSigmaFilter.dlg

6.12.4.5 first_start

lee_sigma_filter.lee_sigma_filter.LeeSigmaFilter.first_start

6.12.4.6 iface

 ${\tt lee_sigma_filter.lee_sigma_filter.LeeSigmaFilter.if} ace$

6.12.4.7 menu

lee_sigma_filter.lee_sigma_filter.LeeSigmaFilter.menu

6.12.4.8 output_dialog

lee_sigma_filter.lee_sigma_filter.LeeSigmaFilter.output_dialog

6.12.4.9 plugin_dir

 ${\tt lee_sigma_filter.lee_sigma_filter.LeeSigmaFilter.plugin_dir}$

6.12.4.10 subMenu

lee_sigma_filter.lee_sigma_filter.LeeSigmaFilter.subMenu

6.12.4.11 translator

```
lee_sigma_filter.lee_sigma_filter.LeeSigmaFilter.translator
```

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

lee_sigma_filter.py

6.13 markov_chain_cfar.markov_chain_cfar.MarkovChainCFAR Class Reference

QGIS Plugin Implementation.

Collaboration diagram for markov chain cfar.markov chain cfar.MarkovChainCFAR:

```
markov chain cfar.markov
_chain_cfar.MarkovChainCFAR
+ action
+ actions
+ arguments
+ dlg
+ first_start
+ iface
+ menu
+ output_dialog
+ plugin_dir
+ subMenu
+ translator
    init ()
+ add action()
+ addToCustomMenu()
+ initGui()
+ run()
+ toggle_histogram_group()
+ tr()
+ unload()
```

Public Member Functions

```
• def __init__ (self, iface)
```

Constructor.

def add_action (self, icon_path, text, callback, enabled_flag=True, add_to_menu=True, add_to_toolbar=True, status tip=None, whats this=None, parent=None)

Add a toolbar icon to the toolbar.

- def addToCustomMenu (self)
- def initGui (self)

Create the menu entries and toolbar icons inside the QGIS GUI.

· def run (self)

Run method that performs all the real work.

- def toggle_histogram_group (self)
- def tr (self, message)

Get the translation for a string using Qt translation API.

• def unload (self)

Removes the plugin menu item and icon from QGIS GUI.

Public Attributes

- action
- · actions
- · arguments
- dlg
- first_start
- iface
- menu
- output_dialog
- plugin dir
- subMenu
- · translator

6.13.1 Detailed Description

QGIS Plugin Implementation.

6.13.2 Constructor & Destructor Documentation

6.13.3 Member Function Documentation

6.13.3.1 add_action()

Add a toolbar icon to the toolbar.

```
:param icon_path: Path to the icon for this action. Can be a resource
   path (e.g. ':/plugins/foo/bar.png') or a normal file system path.
:type icon_path: str
:param text: Text that should be shown in menu items for this action.
:type text: str
:param callback: Function to be called when the action is triggered.
:type callback: function
:param enabled_flag: A flag indicating if the action should be enabled
   by default. Defaults to True.
:type enabled_flag: bool
:param add_to_menu: Flag indicating whether the action should also
   be added to the menu. Defaults to True.
:type add_to_menu: bool
:param add_to_toolbar: Flag indicating whether the action should also
   be added to the toolbar. Defaults to True.
:type add_to_toolbar: bool
:param status_tip: Optional text to show in a popup when mouse pointer
   hovers over the action.
:type status_tip: str
:param parent: Parent widget for the new action. Defaults None.
:type parent: QWidget
:param whats_this: Optional text to show in the status bar when the
   mouse pointer hovers over the action.
:returns: The action that was created. Note that the action is also
   added to self.actions list.
:rtype: QAction
```

```
markov_chain_cfar.markov
_chain_cfar.MarkovChainCFAR.add_action

markov_chain_cfar.MarkovChainCFAR.add
ToCustomMenu
```

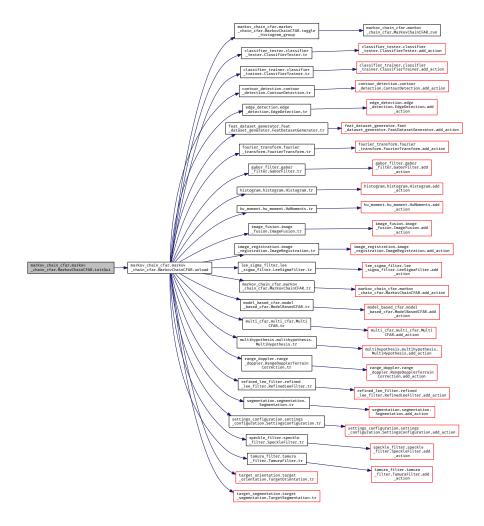
6.13.3.2 addToCustomMenu()

```
\label{lem:cfar.markov_chain_cfar.markovChainCFAR.addToCustomMenu} \mbox{ (} \\ self \mbox{ )}
```

6.13.3.3 initGui()

```
\label{lem:cfar.markov_chain_cfar.markov_chain_cfar.markovChainCFAR.initGui ( \\ self )
```

Create the menu entries and toolbar icons inside the QGIS GUI.



6.13.3.4 run()

```
\label{lem:condition} \mbox{def markov\_chain\_cfar.markov\_chain\_cfar.MarkovChainCFAR.run (} \\ self \mbox{)}
```

Run method that performs all the real work.

6.13.3.5 toggle_histogram_group()

```
\label{lem:cfar.markov_chain_cfar.markov_chain_cfar.MarkovChainCFAR.toggle\_histogram\_group \mbox{ (} \\ self \mbox{ )}
```

Here is the call graph for this function:

```
markov_chain_cfar.markov
_chain_cfar.MarkovChainCFAR.toggle
_histogram_group

markov_chain_cfar.markov
_chain_cfar.MarkovChainCFAR.run
```

6.13.3.6 tr()

Get the translation for a string using Qt translation API.

```
We implement this ourselves since we do not inherit QObject.

:param message: String for translation.

:type message: str, QString

:returns: Translated version of message.

:rtype: QString
```

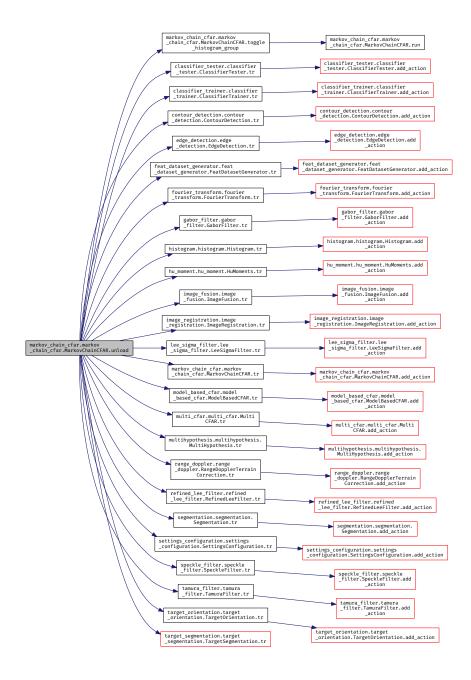
```
markov_chain_cfar.markov
_chain_cfar.MarkovChain_cfar.markov
_chain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.MarkovChain_cfar.M
```

6.13.3.7 unload()

```
\label{lem:cfar.markov_chain_cfar.markov_chain_cfar.markovChainCFAR.unload ( \\ self )
```

Removes the plugin menu item and icon from QGIS GUI.

Here is the call graph for this function:



6.13.4 Member Data Documentation

6.13.4.1 action

 $\verb|markov_chain_cfar.markov_chain_cfar.MarkovChainCFAR.action|\\$

6.13.4.2 actions

markov_chain_cfar.markov_chain_cfar.MarkovChainCFAR.actions

6.13.4.3 arguments

 $\verb|markov_chain_cfar.markov_chain_cfar.MarkovChainCFAR.arguments|$

6.13.4.4 dlg

markov_chain_cfar.markov_chain_cfar.MarkovChainCFAR.dlg

6.13.4.5 first_start

 $\verb|markov_chain_cfar.markov_chain_cfar.MarkovChainCFAR.first_start|\\$

6.13.4.6 iface

markov_chain_cfar.markov_chain_cfar.MarkovChainCFAR.iface

6.13.4.7 menu

markov_chain_cfar.markov_chain_cfar.MarkovChainCFAR.menu

6.13.4.8 output_dialog

 $\verb|markov_chain_cfar.markov_chain_cfar.MarkovChainCFAR.output_dialog| \\$

6.13.4.9 plugin_dir

markov_chain_cfar.markov_chain_cfar.MarkovChainCFAR.plugin_dir

6.13.4.10 subMenu

markov_chain_cfar.markov_chain_cfar.MarkovChainCFAR.subMenu

6.13.4.11 translator

markov_chain_cfar.markov_chain_cfar.MarkovChainCFAR.translator

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

· markov_chain_cfar.py

6.14 model_based_cfar.model_based_cfar.ModelBasedCFAR Class Reference

QGIS Plugin Implementation.

Collaboration diagram for model_based_cfar.model_based_cfar.ModelBasedCFAR:

```
model_based_cfar.model
_based_cfar.ModelBasedCFAR
+ action
+ actions
+ arguments
+ dlg
+ first_start
+ iface
+ menu
+ output_dialog
+ plugin_dir
+ subMenu
+ translator
+ __init__()
+ add_action()
+ addToCustomMenu()
+ initGui()
+ run()
+ tr()
+ unload()
```

Public Member Functions

• def __init__ (self, iface)

Constructor.

 def add_action (self, icon_path, text, callback, enabled_flag=True, add_to_menu=True, add_to_toolbar=True, status_tip=None, whats_this=None, parent=None)

Add a toolbar icon to the toolbar.

- def addToCustomMenu (self)
- def initGui (self)

Create the menu entries and toolbar icons inside the QGIS GUI.

• def run (self)

Run method that performs all the real work.

• def tr (self, message)

Get the translation for a string using Qt translation API.

• def unload (self)

Removes the plugin menu item and icon from QGIS GUI.

Public Attributes

- action
- · actions
- · arguments
- dlg
- first_start
- iface
- menu
- · output_dialog
- · plugin_dir
- subMenu
- translator

6.14.1 Detailed Description

QGIS Plugin Implementation.

6.14.2 Constructor & Destructor Documentation

```
6.14.2.1 __init__()
```

Constructor.

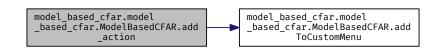
```
:param iface: An interface instance that will be passed to this class
   which provides the hook by which you can manipulate the QGIS
   application at run time.
:type iface: QgsInterface
```

6.14.3 Member Function Documentation

6.14.3.1 add_action()

Add a toolbar icon to the toolbar.

```
:param icon_path: Path to the icon for this action. Can be a resource
   path (e.g. ':/plugins/foo/bar.png') or a normal file system path.
:type icon_path: str
:param text: Text that should be shown in menu items for this action.
:type text: str
:param callback: Function to be called when the action is triggered.
:type callback: function
:param enabled_flag: A flag indicating if the action should be enabled
   by default. Defaults to True.
:type enabled_flag: bool
:param add_to_menu: Flag indicating whether the action should also
   be added to the menu. Defaults to True.
:type add_to_menu: bool
:param add_to_toolbar: Flag indicating whether the action should also
   be added to the toolbar. Defaults to True.
:type add_to_toolbar: bool
:param status_tip: Optional text to show in a popup when mouse pointer
   hovers over the action.
:type status_tip: str
:param parent: Parent widget for the new action. Defaults None.
:type parent: QWidget
:param whats_this: Optional text to show in the status bar when the
   mouse pointer hovers over the action.
:returns: The action that was created. Note that the action is also
   added to self.actions list.
:rtype: QAction
```



6.14.3.2 addToCustomMenu()

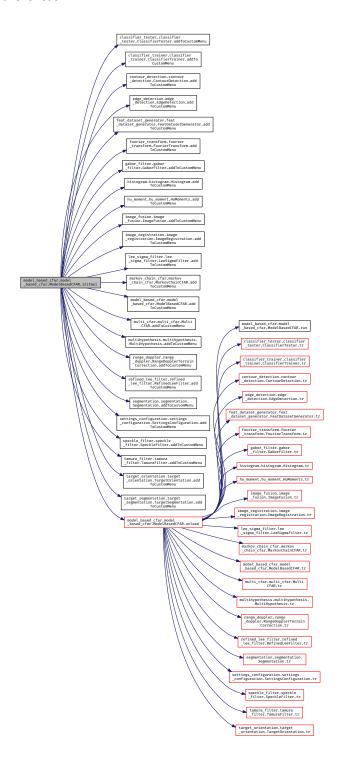
```
\label{local_based_cfar.model_based_cfar.modelBasedCFAR.addToCustomMenu ( \\ self )
```

6.14.3.3 initGui()

```
\label{local_based_cfar.model_based_cfar.modelBasedCFAR.initGui (} self \ )
```

Create the menu entries and toolbar icons inside the QGIS GUI.

Here is the call graph for this function:



6.14.3.4 run()

```
\label{local_based_cfar.model_based_cfar.ModelBasedCFAR.run (} self \ )
```

Run method that performs all the real work.

6.14.3.5 tr()

Get the translation for a string using Qt translation API.

```
We implement this ourselves since we do not inherit QObject.

:param message: String for translation.

:type message: str, QString

:returns: Translated version of message.

:rtype: QString
```

Here is the call graph for this function:

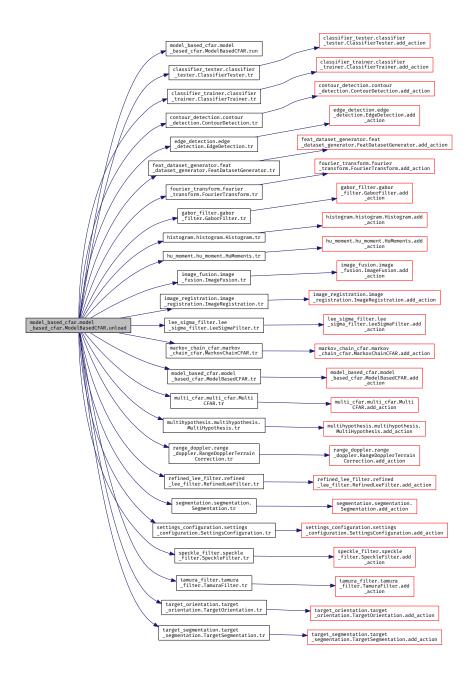


6.14.3.6 unload()

```
\label{local_based_cfar.model_based_cfar.modelBasedCFAR.unload (} self \ )
```

Removes the plugin menu item and icon from QGIS GUI.

Here is the call graph for this function:



6.14.4 Member Data Documentation

6.14.4.1 action

 $\verb|model_based_cfar.model_based_cfar.ModelBasedCFAR.action|\\$

6.14.4.2 actions

 $\verb|model_based_cfar.model_based_cfar.ModelBasedCFAR.actions|\\$

6.14.4.3 arguments

 $\verb|model_based_cfar.model_based_cfar.ModelBasedCFAR.arguments|\\$

6.14.4.4 dlg

 $\verb|model_based_cfar.model_based_cfar.ModelBasedCFAR.dlg|$

6.14.4.5 first_start

model_based_cfar.model_based_cfar.ModelBasedCFAR.first_start

6.14.4.6 iface

 $\verb|model_based_cfar.model_based_cfar.ModelBasedCFAR.iface|$

6.14.4.7 menu

model_based_cfar.model_based_cfar.ModelBasedCFAR.menu

6.14.4.8 output_dialog

 $\verb|model_based_cfar.model_based_cfar.ModelBasedCFAR.output_dialog|\\$

6.14.4.9 plugin_dir

 $\verb|model_based_cfar.model_based_cfar.ModelBasedCFAR.plugin_dir|\\$

6.14.4.10 subMenu

 $\verb|model_based_cfar.model_based_cfar.ModelBasedCFAR.subMenu|\\$

6.14.4.11 translator

```
\verb|model_based_cfar.model_based_cfar.ModelBasedCFAR.translator|\\
```

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

model_based_cfar.py

6.15 multi_cfar.multi_cfar.MultiCFAR Class Reference

QGIS Plugin Implementation.

Collaboration diagram for multi_cfar.multi_cfar.MultiCFAR:

```
multi_cfar.multi_cfar.MultiCFAR
+ action
+ actions
+ arguments
+ dlg
+ first_start
+ iface
+ menu
+ output_dialog
+ plugin_dir
+ subMenu
+ translator
+ init ()
+ add_action()
+ addToCustomMenu()
+ display_bands()
+ initGui()
+ run()
+ tr()
+ unload()
```

Public Member Functions

• def __init__ (self, iface)

Constructor.

• def add_action (self, icon_path, text, callback, enabled_flag=True, add_to_menu=True, add_to_toolbar=True, status tip=None, whats this=None, parent=None)

Add a toolbar icon to the toolbar.

- def addToCustomMenu (self)
- def display_bands (self)
- def initGui (self)

Create the menu entries and toolbar icons inside the QGIS GUI.

• def run (self)

Run method that performs all the real work.

• def tr (self, message)

Get the translation for a string using Qt translation API.

• def unload (self)

Removes the plugin menu item and icon from QGIS GUI.

Public Attributes

- action
- · actions
- · arguments
- dlg
- · first start
- iface
- menu
- output_dialog
- plugin_dir
- subMenu
- · translator

6.15.1 Detailed Description

QGIS Plugin Implementation.

6.15.2 Constructor & Destructor Documentation

```
:param iface: An interface instance that will be passed to this class
   which provides the hook by which you can manipulate the QGIS
   application at run time.
:type iface: QgsInterface
```

Constructor.

6.15.3 Member Function Documentation

6.15.3.1 add action()

Add a toolbar icon to the toolbar.

```
:param icon_path: Path to the icon for this action. Can be a resource
   path (e.g. ':/plugins/foo/bar.png') or a normal file system path.
:type icon_path: str
:param text: Text that should be shown in menu items for this action.
:type text: str
:param callback: Function to be called when the action is triggered.
:type callback: function
:param enabled_flag: A flag indicating if the action should be enabled
   by default. Defaults to True.
:type enabled_flag: bool
:param add_{to}_menu: Flag indicating whether the action should also
   be added to the menu. Defaults to True.
:type add_to_menu: bool
:param add_to_toolbar: Flag indicating whether the action should also
   be added to the toolbar. Defaults to True.
:type add_to_toolbar: bool
:param status_tip: Optional text to show in a popup when mouse pointer
   hovers over the action.
:type status_tip: str
:param parent: Parent widget for the new action. Defaults None.
:type parent: QWidget
:param whats_this: Optional text to show in the status bar when the
   mouse pointer hovers over the action.
:returns: The action that was created. Note that the action is also
   added to self.actions list.
:rtype: QAction
```

```
multi_cfar.multi_cfar.Multi
CFAR.add_action

multi_cfar.multi_cfar.Multi
CFAR.addToCustomMenu
```

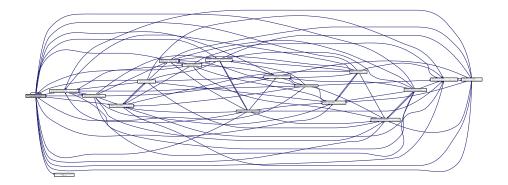
6.15.3.2 addToCustomMenu()

```
\label{lem:def-multi_cfar.MultiCFAR.addToCustomMenu} \mbox{ (} \\ self \mbox{ )}
```

6.15.3.3 display_bands()

```
\label{lem:cfar.multi_cfar.multiCFAR.display_bands} \mbox{ (} \\ self \mbox{ )}
```

Here is the call graph for this function:

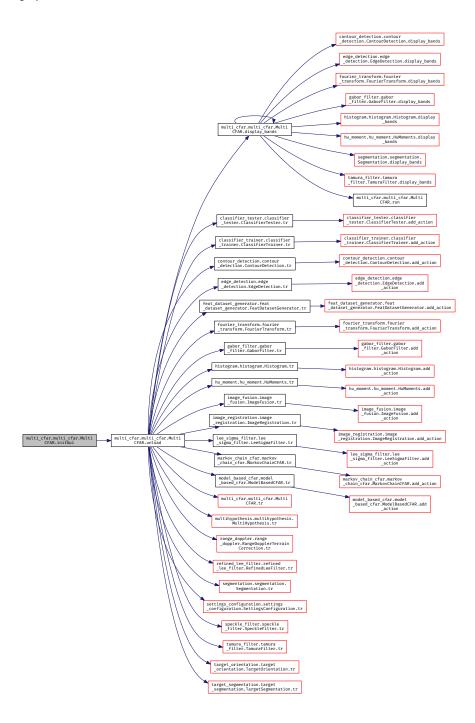


6.15.3.4 initGui()

```
def multi_cfar.multi_cfar.MultiCFAR.initGui ( self )
```

Create the menu entries and toolbar icons inside the QGIS GUI.

Here is the call graph for this function:



6.15.3.5 run()

```
\label{lem:cfar.multi_cfar.multi_cfar.multi} \begin{tabular}{ll} def & multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.multi_cfar.mult
```

Run method that performs all the real work.

6.15.3.6 tr()

Get the translation for a string using Qt translation API.

```
We implement this ourselves since we do not inherit QObject.

:param message: String for translation.

:type message: str, QString

:returns: Translated version of message.

:rtype: QString
```

Here is the call graph for this function:

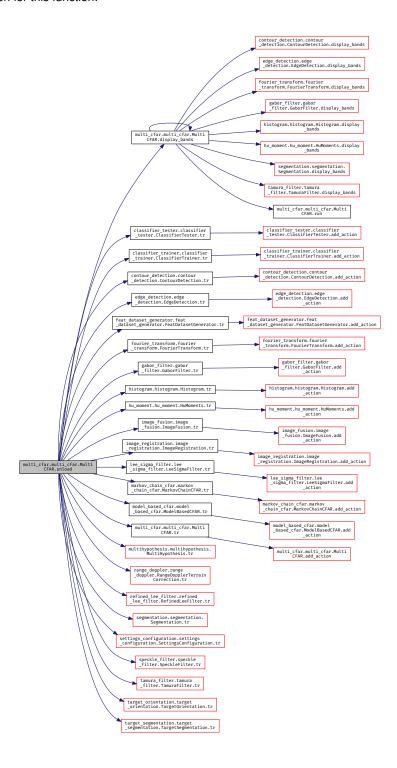


6.15.3.7 unload()

```
\label{lem:cfar.multi_cfar.multi} $$\operatorname{def multi\_cfar.MultiCFAR.unload} \ ($$\operatorname{\it self}$ )
```

Removes the plugin menu item and icon from QGIS GUI.

Here is the call graph for this function:



6.15.4 Member Data Documentation

6.15.4.1 action

 $\verb| multi_cfar.multi_cfar.MultiCFAR.action| \\$

6.15.4.2 actions

multi_cfar.multi_cfar.MultiCFAR.actions

6.15.4.3 arguments

multi_cfar.multi_cfar.MultiCFAR.arguments

6.15.4.4 dlg

multi_cfar.multi_cfar.MultiCFAR.dlg

6.15.4.5 first_start

 $\verb| multi_cfar.multi_cfar.MultiCFAR.first_start|\\$

6.15.4.6 iface

 $\verb| multi_cfar.multi_cfar.MultiCFAR.iface| \\$

6.15.4.7 menu

 $\verb| multi_cfar.multi_cfar.MultiCFAR.menu| \\$

6.15.4.8 output_dialog

multi_cfar.multi_cfar.MultiCFAR.output_dialog

6.15.4.9 plugin_dir

 $\verb| multi_cfar.multi_cfar.MultiCFAR.plugin_dir|\\$

6.15.4.10 subMenu

multi_cfar.multi_cfar.MultiCFAR.subMenu

6.15.4.11 translator

multi_cfar.multi_cfar.MultiCFAR.translator

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

• multi_cfar.py

6.16 multihypothesis.multihypothesis.MultiHypothesis Class Reference

QGIS Plugin Implementation.

Collaboration diagram for multihypothesis.multihypothesis.MultiHypothesis:

```
multihypothesis.multihypothesis.
        MultiHypothesis
+ action
+ actions
+ configContents
+ dlg
+ featureImagePairs
+ first start
+ iface
+ menu
+ originalImagePairs
+ output_dialog
+ plugin_dir
+ scalingPairs
+ translator
    init ()
+ add action()
+ addToCustomMenu()
+ featureImageAdd()
+ featureImageDelete()
+ initGui()
+ originalImageAdd()
+ originalImageDelete()
+ pageChange()
+ run()
+ scalingAdd()
+ scalingDelete()
+ tr()
+ unload()
```

Public Member Functions

```
def __init__ (self, iface)
```

Constructor.

• def add_action (self, icon_path, text, callback, enabled_flag=True, add_to_menu=True, add_to_toolbar=True, status tip=None, whats this=None, parent=None)

Add a toolbar icon to the toolbar.

- def addToCustomMenu (self)
- def featureImageAdd (self)
- def featureImageDelete (self)
- def initGui (self)

Create the menu entries and toolbar icons inside the QGIS GUI.

- · def originalImageAdd (self)
- def originalImageDelete (self)
- def pageChange (self, pagesToChange)
- def run (self)

Run method that performs all the real work.

- def scalingAdd (self)
- def scalingDelete (self)
- def tr (self, message)

Get the translation for a string using Qt translation API.

• def unload (self)

Removes the plugin menu item and icon from QGIS GUI.

Public Attributes

- action
- · actions
- configContents
- dlg
- featureImagePairs
- first_start
- iface
- menu
- originalImagePairs
- output_dialog
- plugin_dir
- scalingPairs
- translator

6.16.1 Detailed Description

QGIS Plugin Implementation.

6.16.2 Constructor & Destructor Documentation

6.16.3 Member Function Documentation

6.16.3.1 add_action()

Add a toolbar icon to the toolbar.

```
:param icon_path: Path to the icon for this action. Can be a resource
   path (e.g. ':/plugins/foo/bar.png') or a normal file system path.
:type icon_path: str
:param text: Text that should be shown in menu items for this action.
:type text: str
:param callback: Function to be called when the action is triggered.
:type callback: function
:param enabled_flag: A flag indicating if the action should be enabled
   by default. Defaults to True.
:type enabled_flag: bool
:param add_to_menu: Flag indicating whether the action should also
   be added to the menu. Defaults to True.
:type add_to_menu: bool
:param add_to_toolbar: Flag indicating whether the action should also
   be added to the toolbar. Defaults to True.
:type add_to_toolbar: bool
:param status_tip: Optional text to show in a popup when mouse pointer
   hovers over the action.
:type status_tip: str
:param parent: Parent widget for the new action. Defaults None.
:type parent: QWidget
:param whats_this: Optional text to show in the status bar when the
   mouse pointer hovers over the action.
:returns: The action that was created. Note that the action is also
   added to self.actions list.
:rtype: QAction
```

```
multihypothesis.multihypothesis.
MultiHypothesis.add_action

multihypothesis.addToCustomMenu
```

6.16.3.2 addToCustomMenu()

```
\label{eq:multihypothesis.multihypothesis.multiHypothesis.addToCustomMenu ( \\ self )
```

6.16.3.3 featureImageAdd()

```
def multihypothesis.multihypothesis.featureImageAdd ( self \ )
```

Here is the call graph for this function:



6.16.3.4 featureImageDelete()

```
def multihypothesis.multihypothesis.featureImageDelete ( self \ )
```

Here is the call graph for this function:

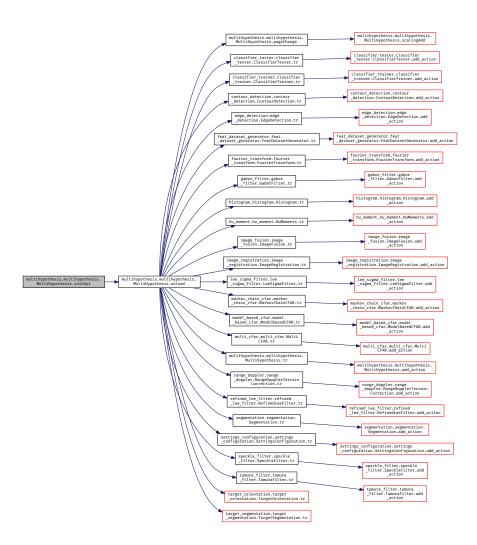


6.16.3.5 initGui()

```
def multihypothesis.multihypothesis.MultiHypothesis.initGui ( self \ )
```

Create the menu entries and toolbar icons inside the QGIS GUI.

Here is the call graph for this function:



6.16.3.6 originallmageAdd()

```
def multihypothesis.multihypothesis.MultiHypothesis.originalImageAdd ( self \ )
```

Here is the call graph for this function:



6.16.3.7 originalImageDelete()

def multihypothesis.multihypothesis.originalImageDelete ($self \)$

Here is the call graph for this function:



6.16.3.8 pageChange()

```
def multihypothesis.multihypothesis.MultiHypothesis.pageChange ( self, \\ pagesToChange \ )
```

Here is the call graph for this function:



6.16.3.9 run()

```
def multihypothesis.multihypothesis.MultiHypothesis.run ( self\;)
```

Run method that performs all the real work.

Here is the call graph for this function:



6.16.3.10 scalingAdd()

```
def multihypothesis.multihypothesis.MultiHypothesis.scalingAdd ( self \ )
```

Here is the call graph for this function:



6.16.3.11 scalingDelete()

```
def multihypothesis.multihypothesis.scaling
Delete ( self\ )
```

Here is the call graph for this function:



6.16.3.12 tr()

```
def multihypothesis.multihypothesis.MultiHypothesis.tr ( self, \\ message )
```

Get the translation for a string using Qt translation API.

```
We implement this ourselves since we do not inherit QObject.

:param message: String for translation.

:type message: str, QString

:returns: Translated version of message.

:rtype: QString
```

Here is the call graph for this function:

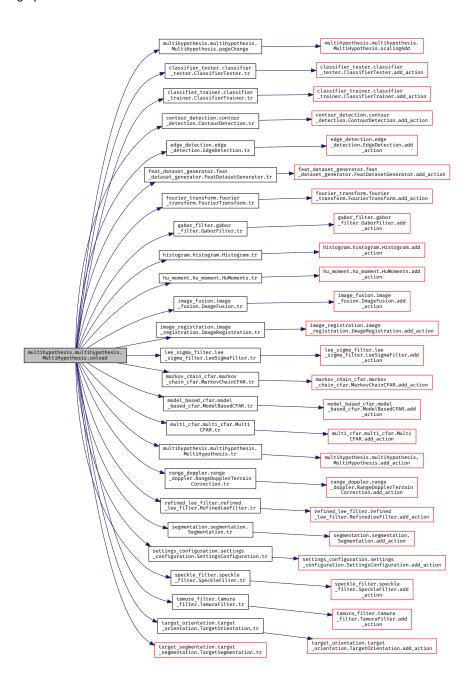


6.16.3.13 unload()

```
def multihypothesis.multihypothesis.MultiHypothesis.unload ( self \ )
```

Removes the plugin menu item and icon from QGIS GUI.

Here is the call graph for this function:



6.16.4 Member Data Documentation

6.16.4.1 action

 $\verb| multihypothesis.multihypothesis.MultiHypothesis.action|\\$

6.16.4.2 actions

 $\verb| multihypothesis.multihypothesis.MultiHypothesis.actions|\\$

6.16.4.3 configContents

 $\verb|multihypothesis.multihypothesis.MultiHypothesis.configContents|\\$

6.16.4.4 dlg

multihypothesis.multihypothesis.MultiHypothesis.dlg

6.16.4.5 featureImagePairs

multihypothesis.multihypothesis.MultiHypothesis.featureImagePairs

6.16.4.6 first_start

 $\verb|multihypothesis.multihypothesis.MultiHypothesis.first_start|\\$

6.16.4.7 iface

multihypothesis.multihypothesis.MultiHypothesis.iface

6.16.4.8 menu

 $\verb|multihypothesis.multihypothesis.MultiHypothesis.menu|\\$

6.16.4.9 originalImagePairs

 $\verb|multihypothesis.multihypothesis.MultiHypothesis.original Image Pairs|\\$

6.16.4.10 output_dialog

 $\verb|multihypothesis.multihypothesis.MultiHypothesis.output_dialog|\\$

6.16.4.11 plugin_dir

multihypothesis.multihypothesis.MultiHypothesis.plugin_dir

6.16.4.12 scalingPairs

multihypothesis.multihypothesis.MultiHypothesis.scalingPairs

6.16.4.13 translator

 $\verb|multihypothesis.multihypothesis.MultiHypothesis.translator|\\$

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

· multihypothesis.py

6.17 range_doppler.range_doppler.RangeDopplerTerrainCorrection Class Reference

QGIS Plugin Implementation.

Collaboration diagram for range_doppler.range_doppler.RangeDopplerTerrainCorrection:

```
range_doppler.range
_doppler.RangeDopplerTerrain
          Correction
+ action
+ actions
+ arguments
+ dlg
+ first_start
+ iface
+ menu
+ output_dialog
+ plugin_dir
+ translator
+ __init__()
+ add_action()
+ addToCustomMenu()
+ initGui()
 run()
 tr()
+ unload()
```

Public Member Functions

• def __init__ (self, iface)

Constructor.

• def add_action (self, icon_path, text, callback, enabled_flag=True, add_to_menu=True, add_to_toolbar=True, status tip=None, whats this=None, parent=None)

Add a toolbar icon to the toolbar.

- def addToCustomMenu (self)
- def initGui (self)

Create the menu entries and toolbar icons inside the QGIS GUI.

• def run (self)

Run method that performs all the real work.

• def tr (self, message)

Get the translation for a string using Qt translation API.

• def unload (self)

Removes the plugin menu item and icon from QGIS GUI.

Public Attributes

- · action
- · actions
- · arguments

- dlg
- first_start
- iface
- menu
- · output dialog
- plugin_dir
- translator

6.17.1 Detailed Description

QGIS Plugin Implementation.

6.17.2 Constructor & Destructor Documentation

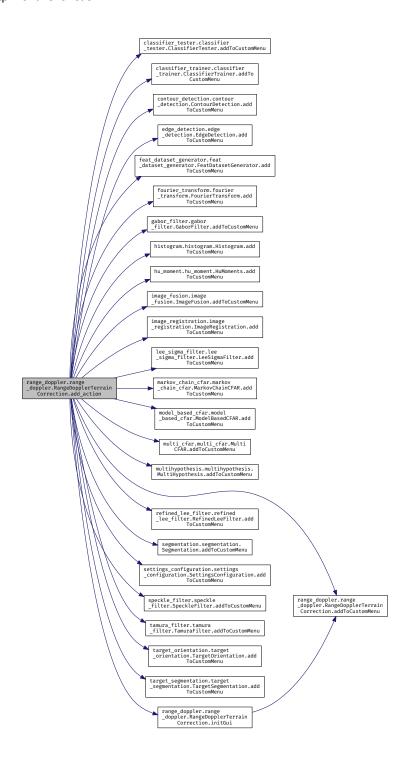
6.17.3 Member Function Documentation

6.17.3.1 add_action()

Add a toolbar icon to the toolbar.

```
:param icon_path: Path to the icon for this action. Can be a resource
   path (e.g. ':/plugins/foo/bar.png') or a normal file system path.
:type icon_path: str
:param text: Text that should be shown in menu items for this action.
:param callback: Function to be called when the action is triggered.
:type callback: function
:param enabled_flag: A flag indicating if the action should be enabled
   by default. Defaults to True.
:type enabled_flag: bool
:param add_to_menu: Flag indicating whether the action should also
   be added to the menu. Defaults to True.
:type add_to_menu: bool
:param add_to_toolbar: Flag indicating whether the action should also
   be added to the toolbar. Defaults to True.
:type add_to_toolbar: bool
:param status_tip: Optional text to show in a popup when mouse pointer
   hovers over the action.
:type status_tip: str
:param parent: Parent widget for the new action. Defaults None.
:type parent: QWidget
:param whats_this: Optional text to show in the status bar when the
   mouse pointer hovers over the action.
:returns: The action that was created. Note that the action is also
   added to self.actions list.
:rtype: QAction
```

Here is the call graph for this function:



6.17.3.2 addToCustomMenu()

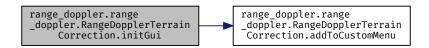
def range_doppler.range_doppler.RangeDopplerTerrainCorrection.addToCustomMenu ($self \)$

6.17.3.3 initGui()

```
def range_doppler.range_doppler.RangeDopplerTerrainCorrection.initGui ( self \ )
```

Create the menu entries and toolbar icons inside the QGIS GUI.

Here is the call graph for this function:



6.17.3.4 run()

```
def range_doppler.range_doppler.RangeDopplerTerrainCorrection.run ( self \ )
```

Run method that performs all the real work.

6.17.3.5 tr()

```
def range_doppler.range_doppler.RangeDopplerTerrainCorrection.tr ( self, \\ message \ )
```

Get the translation for a string using Qt translation API.

```
We implement this ourselves since we do not inherit QObject.

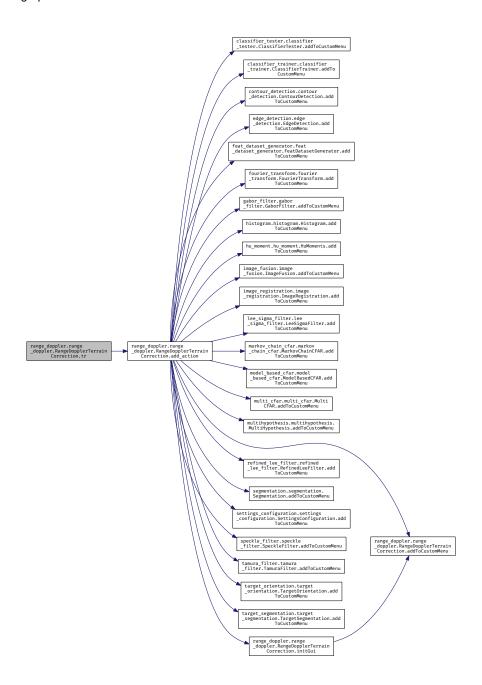
:param message: String for translation.

:type message: str, QString

:returns: Translated version of message.

:rtype: QString
```

Here is the call graph for this function:



6.17.3.6 unload()

```
def range_doppler.range_doppler.RangeDopplerTerrainCorrection.unload ( self \ )
```

Removes the plugin menu item and icon from QGIS GUI.

6.17.4 Member Data Documentation

6.17.4.1 action

range_doppler.range_doppler.RangeDopplerTerrainCorrection.action

6.17.4.2 actions

 ${\tt range_doppler.RangeDopplerTerrainCorrection.actions}$

6.17.4.3 arguments

range_doppler.range_doppler.RangeDopplerTerrainCorrection.arguments

6.17.4.4 dlg

 $\verb|range_doppler.range_doppler.RangeDopplerTerrainCorrection.dlg|\\$

6.17.4.5 first_start

range_doppler.range_doppler.RangeDopplerTerrainCorrection.first_start

6.17.4.6 iface

 $range_doppler. RangeDopplerTerrainCorrection. if ace$

6.17.4.7 menu

range_doppler.range_doppler.RangeDopplerTerrainCorrection.menu

6.17.4.8 output_dialog

range_doppler.range_doppler.RangeDopplerTerrainCorrection.output_dialog

6.17.4.9 plugin_dir

range_doppler.range_doppler.RangeDopplerTerrainCorrection.plugin_dir

6.17.4.10 translator

range_doppler.range_doppler.RangeDopplerTerrainCorrection.translator

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

range_doppler.py

6.18 refined_lee_filter.refined_lee_filter.RefinedLeeFilter Class Reference

QGIS Plugin Implementation.

Collaboration diagram for refined_lee_filter.refined_lee_filter.RefinedLeeFilter:

```
refined_lee_filter.refined
_lee_filter.RefinedLeeFilter
+ action
+ actions
+ arguments
+ dlg
+ first_start
+ iface
+ menu
+ output_dialog
+ plugin_dir
+ subMenu
+ translator
    init__
+ add_action()
+ addToCustomMenu()
+ initGui()
+ run()
+ tr()
+ unload()
```

Public Member Functions

- def __init__ (self, iface)
- def add_action (self, icon_path, text, callback, enabled_flag=True, add_to_menu=True, add_to_toolbar=True, status_tip=None, whats_this=None, parent=None)

Add a toolbar icon to the toolbar.

- def addToCustomMenu (self)
- · def initGui (self)

Create the menu entries and toolbar icons inside the QGIS GUI.

· def run (self)

Run method that performs all the real work.

- def tr (self, message)
- def unload (self)

Removes the plugin menu item and icon from QGIS GUI.

Public Attributes

- action
- · actions
- · arguments
- dlg
- · first start
- iface
- menu
- · output_dialog
- plugin_dir
- subMenu
- · translator

6.18.1 Detailed Description

QGIS Plugin Implementation.

6.18.2 Constructor & Destructor Documentation

6.18.3 Member Function Documentation

6.18.3.1 add_action()

Add a toolbar icon to the toolbar.

```
:param icon_path: Path to the icon for this action. Can be a resource
   path (e.g. ':/plugins/foo/bar.png') or a normal file system path.
:type icon_path: str
:param text: Text that should be shown in menu items for this action.
:type text: str
:param callback: Function to be called when the action is triggered.
:type callback: function
:param enabled_flag: A flag indicating if the action should be enabled
   by default. Defaults to True.
:type enabled_flag: bool
:param add_to_menu: Flag indicating whether the action should also
   be added to the menu. Defaults to True.
:type add_to_menu: bool
:param add_to_toolbar: Flag indicating whether the action should also
   be added to the toolbar. Defaults to True.
:type add_to_toolbar: bool
:param status_tip: Optional text to show in a popup when mouse pointer
   hovers over the action.
:type status_tip: str
:param parent: Parent widget for the new action. Defaults None.
:type parent: QWidget
:param whats_this: Optional text to show in the status bar when the
   mouse pointer hovers over the action.
:returns: The action that was created. Note that the action is also
   added to self.actions list.
:rtype: QAction
```

Here is the call graph for this function:

```
refined_lee_filter.refined
_lee_filter.RefinedLeeFilter.add_action

refined_lee_filter.RefinedLeeFilter.add
ToCustomMenu
```

6.18.3.2 addToCustomMenu()

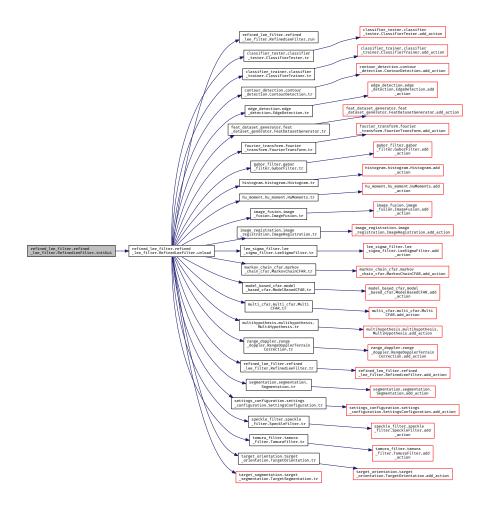
```
def refined_lee_filter.refined_lee_filter.RefinedLeeFilter.addToCustomMenu ( self \ )
```

6.18.3.3 initGui()

```
def refined_lee_filter.refined_lee_filter.RefinedLeeFilter.initGui ( self )
```

Create the menu entries and toolbar icons inside the QGIS GUI.

Here is the call graph for this function:



6.18.3.4 run()

```
def refined_lee_filter.refined_lee_filter.RefinedLeeFilter.run ( self \ )
```

Run method that performs all the real work.

6.18.3.5 tr()

Here is the call graph for this function:

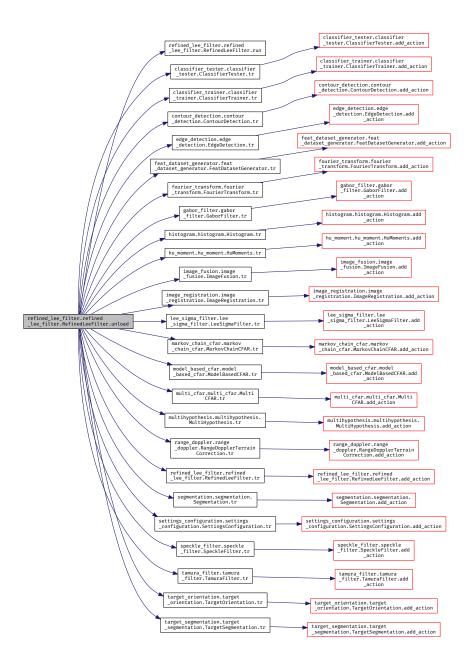


6.18.3.6 unload()

```
def refined_lee_filter.refined_lee_filter.RefinedLeeFilter.unload ( self )
```

Removes the plugin menu item and icon from QGIS GUI.

Here is the call graph for this function:



6.18.4 Member Data Documentation

6.18.4.1 action

refined_lee_filter.refined_lee_filter.RefinedLeeFilter.action

6.18.4.2 actions

refined_lee_filter.refined_lee_filter.RefinedLeeFilter.actions

6.18.4.3 arguments

refined_lee_filter.refined_lee_filter.RefinedLeeFilter.arguments

6.18.4.4 dlg

 ${\tt refined_lee_filter.refined_lee_filter.RefinedLeeFilter.dlg}$

6.18.4.5 first_start

refined_lee_filter.refined_lee_filter.RefinedLeeFilter.first_start

6.18.4.6 iface

 ${\tt refined_lee_filter.refined_lee_filter.RefinedLeeFilter.if} acc$

6.18.4.7 menu

refined_lee_filter.refined_lee_filter.RefinedLeeFilter.menu

6.18.4.8 output_dialog

 ${\tt refined_lee_filter.refined_lee_filter.RefinedLeeFilter.output_dialog}$

6.18.4.9 plugin_dir

 $refined_lee_filter.refined_lee_filter.RefinedLeeFilter.plugin_dir$

6.18.4.10 subMenu

```
refined_lee_filter.refined_lee_filter.RefinedLeeFilter.subMenu
```

6.18.4.11 translator

```
refined_lee_filter.refined_lee_filter.RefinedLeeFilter.translator
```

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

refined_lee_filter.py

6.19 segmentation.segmentation.Segmentation Class Reference

QGIS Plugin Implementation.

Collaboration diagram for segmentation.segmentation:

```
segmentation.segmentation.
       Segmentation
+ action
+ actions
+ arguments
+ dlg
+ first_start
+ iface
+ menu
+ output_dialog
+ plugin_dir
+ subMenu
+ translator
   init ()
+ add action()
+ addToCustomMenu()
+ display_bands()
+ initGui()
+ run()
 tr()
 unload()
```

Public Member Functions

```
• def __init__ (self, iface)
```

Constructor.

 def add_action (self, icon_path, text, callback, enabled_flag=True, add_to_menu=True, add_to_toolbar=True, status tip=None, whats this=None, parent=None)

Add a toolbar icon to the toolbar.

- def addToCustomMenu (self)
- def display_bands (self)
- def initGui (self)

Create the menu entries and toolbar icons inside the QGIS GUI.

• def run (self)

Run method that performs all the real work.

• def tr (self, message)

Get the translation for a string using Qt translation API.

• def unload (self)

Removes the plugin menu item and icon from QGIS GUI.

Public Attributes

- · action
- · actions
- · arguments
- dlg
- · first start
- iface
- menu
- output_dialog
- plugin_dir
- subMenu
- · translator

6.19.1 Detailed Description

application at run time.
:type iface: QgsInterface

QGIS Plugin Implementation.

6.19.2 Constructor & Destructor Documentation

which provides the hook by which you can manipulate the QGIS

6.19.3 Member Function Documentation

6.19.3.1 add action()

Add a toolbar icon to the toolbar.

```
:param icon_path: Path to the icon for this action. Can be a resource
   path (e.g. ':/plugins/foo/bar.png') or a normal file system path.
:type icon_path: str
:param text: Text that should be shown in menu items for this action.
:type text: str
:param callback: Function to be called when the action is triggered.
:type callback: function
:param enabled_flag: A flag indicating if the action should be enabled
   by default. Defaults to True.
:type enabled_flag: bool
:param add_{to}_menu: Flag indicating whether the action should also
   be added to the menu. Defaults to True.
:type add_to_menu: bool
:param add_to_toolbar: Flag indicating whether the action should also
   be added to the toolbar. Defaults to True.
:type add_to_toolbar: bool
:param status_tip: Optional text to show in a popup when mouse pointer
   hovers over the action.
:type status_tip: str
:param parent: Parent widget for the new action. Defaults None.
:type parent: QWidget
:param whats_this: Optional text to show in the status bar when the
   mouse pointer hovers over the action.
:returns: The action that was created. Note that the action is also
   added to self.actions list.
:rtype: QAction
```

Here is the call graph for this function:

```
segmentation.segmentation.
Segmentation.add_action
Segmentation.addToCustomMenu
```

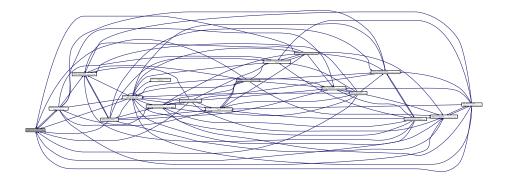
6.19.3.2 addToCustomMenu()

```
\label{eq:continuous} \mbox{def segmentation.segmentation.add} \mbox{ToCustomMenu (} \\ self \mbox{)}
```

6.19.3.3 display_bands()

```
\label{lem:constrain} \mbox{def segmentation.segmentation.display\_bands (} \\ self \mbox{)}
```

Here is the call graph for this function:

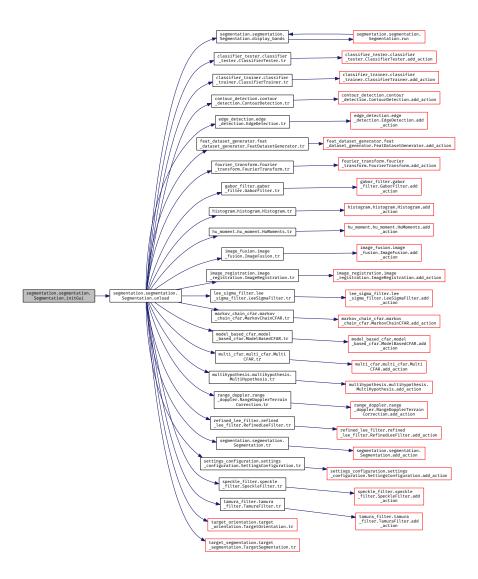


6.19.3.4 initGui()

```
def segmentation.segmentation.initGui ( self )
```

Create the menu entries and toolbar icons inside the QGIS GUI.

Here is the call graph for this function:

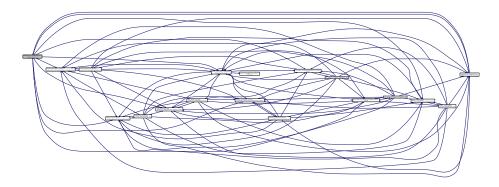


6.19.3.5 run()

```
\label{eq:continuous} \mbox{def segmentation.segmentation.run (} \\ self \mbox{)}
```

Run method that performs all the real work.

Here is the call graph for this function:



6.19.3.6 tr()

```
def segmentation.segmentation.tr ( self, \\ message )
```

Get the translation for a string using Qt translation API.

```
We implement this ourselves since we do not inherit QObject.

:param message: String for translation.

:type message: str, QString

:returns: Translated version of message.

:rtype: QString
```

Here is the call graph for this function:

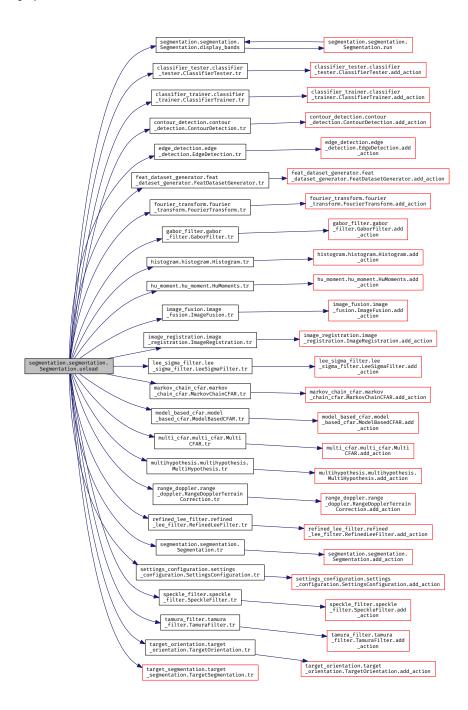


6.19.3.7 unload()

```
\label{eq:continuous_segmentation} \mbox{def segmentation.segmentation.unload (} \\ self \mbox{)}
```

Removes the plugin menu item and icon from QGIS GUI.

Here is the call graph for this function:



6.19.4 Member Data Documentation

6.19.4.1 action

segmentation.segmentation.Segmentation.action

6.19.4.2 actions

segmentation.segmentation.Segmentation.actions

6.19.4.3 arguments

 $\verb"segmentation.segmentation.Segmentation.arguments"$

6.19.4.4 dlg

 $\verb"segmentation.segmentation.Segmentation.dlg"$

6.19.4.5 first_start

segmentation.segmentation.Segmentation.first_start

6.19.4.6 iface

segmentation.segmentation.iface

6.19.4.7 menu

segmentation.segmentation.Segmentation.menu

6.19.4.8 output_dialog

 $\verb|segmentation.segmentation.segmentation.output_dialog|\\$

6.19.4.9 plugin_dir

 $\verb|segmentation.segmentation.segmentation.plugin_dir|\\$

6.19.4.10 subMenu

segmentation.segmentation.Segmentation.subMenu

6.19.4.11 translator

segmentation.segmentation.Segmentation.translator

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

· segmentation.py

6.20 settings_configuration.settings_configuration.Settings Configuration Class Reference

QGIS Plugin Implementation.

Collaboration diagram for settings_configuration.settings_configuration:

```
settings_configuration.settings
_configuration.SettingsConfiguration

+ action
+ actions
+ dlg
+ first_start
+ iface
+ menu
+ plugin_dir
+ translator

+ __init__()
+ add_action()
+ addToCustomMenu()
+ initGui()
+ run()
+ tr()
+ unload()
```

Public Member Functions

def __init__ (self, iface)

Constructor.

 def add_action (self, icon_path, text, callback, enabled_flag=True, add_to_menu=True, add_to_toolbar=True, status_tip=None, whats_this=None, parent=None)

Add a toolbar icon to the toolbar.

- def addToCustomMenu (self)
- · def initGui (self)

Create the menu entries and toolbar icons inside the QGIS GUI.

• def run (self)

Run method that performs all the real work.

• def tr (self, message)

Get the translation for a string using Qt translation API.

• def unload (self)

Removes the plugin menu item and icon from QGIS GUI.

Public Attributes

- action
- · actions
- dlg
- · first_start
- iface
- menu
- plugin_dir
- translator

6.20.1 Detailed Description

application at run time.
:type iface: QgsInterface

QGIS Plugin Implementation.

6.20.2 Constructor & Destructor Documentation

6.20.3 Member Function Documentation

6.20.3.1 add action()

Add a toolbar icon to the toolbar.

```
:param icon_path: Path to the icon for this action. Can be a resource
   path (e.g. ':/plugins/foo/bar.png') or a normal file system path.
:type icon_path: str
:param text: Text that should be shown in menu items for this action.
:type text: str
:param callback: Function to be called when the action is triggered.
:type callback: function
:param enabled_flag: A flag indicating if the action should be enabled
   by default. Defaults to True.
:type enabled_flag: bool
:param add_to_menu: Flag indicating whether the action should also
   be added to the menu. Defaults to True.
:type add to menu: bool
:param add_to_toolbar: Flag indicating whether the action should also
   be added to the toolbar. Defaults to True.
:type add_to_toolbar: bool
:param status_tip: Optional text to show in a popup when mouse pointer
   hovers over the action.
:type status_tip: str
:param parent: Parent widget for the new action. Defaults None.
:type parent: QWidget
:param whats_this: Optional text to show in the status bar when the
   mouse pointer hovers over the action.
:returns: The action that was created. Note that the action is also
   added to self.actions list.
:rtype: QAction
```

Here is the call graph for this function:

6.20.3.2 addToCustomMenu()

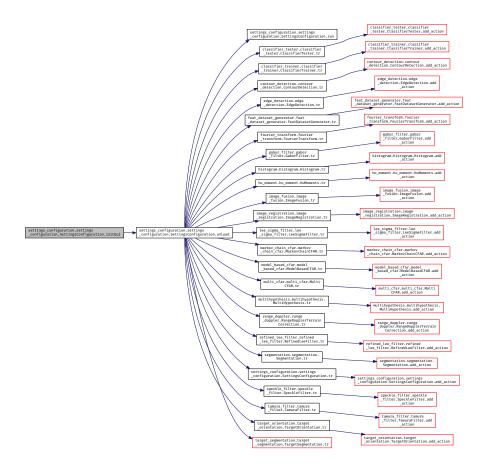
```
{\tt def~settings\_configuration.settings\_configuration.SettingsConfiguration.addToCustomMenu~(} \\ self~)
```

6.20.3.3 initGui()

```
def settings_configuration.settings_configuration.SettingsConfiguration.initGui ( self )
```

Create the menu entries and toolbar icons inside the QGIS GUI.

Here is the call graph for this function:



6.20.3.4 run()

```
def settings_configuration.settings_configuration.SettingsConfiguration.run ( self )
```

Run method that performs all the real work.

6.20.3.5 tr()

```
def settings_configuration.settings_configuration.SettingsConfiguration.tr ( self, \\ message \ )
```

Get the translation for a string using Qt translation API.

```
We implement this ourselves since we do not inherit QObject.

:param message: String for translation.

:type message: str, QString

:returns: Translated version of message.

:rtype: QString
```

Here is the call graph for this function:

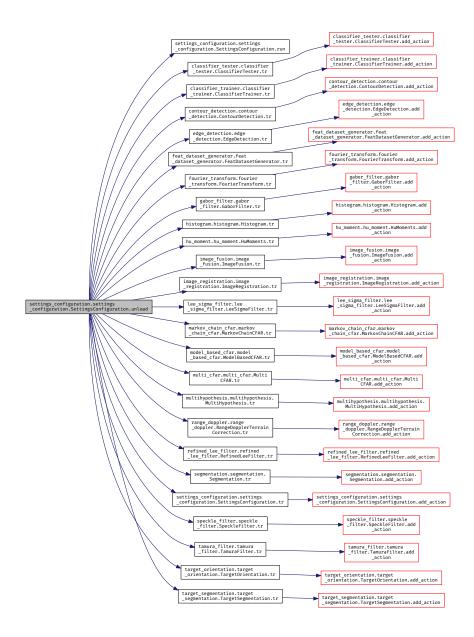


6.20.3.6 unload()

```
def settings_configuration.settings_configuration.SettingsConfiguration.unload ( self\ )
```

Removes the plugin menu item and icon from QGIS GUI.

Here is the call graph for this function:



6.20.4 Member Data Documentation

6.20.4.1 action

 $\verb|settings_configuration.settings_configuration.SettingsConfiguration.action|\\$

6.20.4.2 actions

 ${\tt settings_configuration.settings_configuration.SettingsConfiguration.actions}$

6.20.4.3 dlg

 $\verb|settings_configuration.settings_configuration.SettingsConfiguration.dlg|\\$

6.20.4.4 first_start

 $\verb|settings_configuration.settings_configuration.SettingsConfiguration.first_start|\\$

6.20.4.5 iface

 $\verb|settings_configuration.settings_configuration.SettingsConfiguration.if ace|\\$

6.20.4.6 menu

 $\verb|settings_configuration.settings_configuration.SettingsConfiguration.menu|\\$

6.20.4.7 plugin_dir

 ${\tt settings_configuration.settings_configuration.SettingsConfiguration.plugin_dir}$

6.20.4.8 translator

 ${\tt settings_configuration.settings_configuration.SettingsConfiguration.translator}$

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

• settings_configuration.py

6.21 speckle_filter.speckle_filter.SpeckleFilter Class Reference

QGIS Plugin Implementation.

Collaboration diagram for speckle_filter.speckle_filter.SpeckleFilter:

```
speckle_filter.speckle
_filter.SpeckleFilter
+ action
+ actions
+ arguments
+ first_start
+ iface
+ menu
+ output_dialog
+ plugin_dir
+ subMenu
+ translator
+ __init__()
+ add_action()
+ addToCustomMenu()
+ initGui()
+ run()
+ select_input_img()
+ select_output_img()
 tr()
 unload()
```

Public Member Functions

def __init__ (self, iface)

Constructor.

 def add_action (self, icon_path, text, callback, enabled_flag=True, add_to_menu=True, add_to_toolbar=True, status_tip=None, whats_this=None, parent=None)

Add a toolbar icon to the toolbar.

- def addToCustomMenu (self)
- def initGui (self)

Create the menu entries and toolbar icons inside the QGIS GUI.

• def run (self)

Run method that performs all the real work.

- def select_input_img (self)
- def select_output_img (self)
- def tr (self, message)

Get the translation for a string using Qt translation API.

• def unload (self)

Removes the plugin menu item and icon from QGIS GUI.

Public Attributes

- action
- · actions
- · arguments
- dlg
- first_start
- iface
- menu
- output_dialog
- plugin_dir
- subMenu
- translator

6.21.1 Detailed Description

QGIS Plugin Implementation.

6.21.2 Constructor & Destructor Documentation

```
6.21.2.1 __init__()
```

Constructor.

```
:param iface: An interface instance that will be passed to this class
    which provides the hook by which you can manipulate the QGIS
    application at run time.
:type iface: QgsInterface
```

6.21.3 Member Function Documentation

6.21.3.1 add_action()

Add a toolbar icon to the toolbar.

```
:param icon_path: Path to the icon for this action. Can be a resource
   path (e.g. ':/plugins/foo/bar.png') or a normal file system path.
:type icon_path: str
:param text: Text that should be shown in menu items for this action.
:type text: str
:param callback: Function to be called when the action is triggered.
:type callback: function
:param enabled_flag: A flag indicating if the action should be enabled
   by default. Defaults to True.
:type enabled_flag: bool
:param add_to_menu: Flag indicating whether the action should also
   be added to the menu. Defaults to True.
:type add_to_menu: bool
:param add_to_toolbar: Flag indicating whether the action should also
   be added to the toolbar. Defaults to True.
:type add_to_toolbar: bool
:param status_tip: Optional text to show in a popup when mouse pointer
   hovers over the action.
:type status_tip: str
:param parent: Parent widget for the new action. Defaults None.
:type parent: QWidget
:param whats_this: Optional text to show in the status bar when the
   mouse pointer hovers over the action.
:returns: The action that was created. Note that the action is also
   added to self.actions list.
:rtvpe: OAction
```



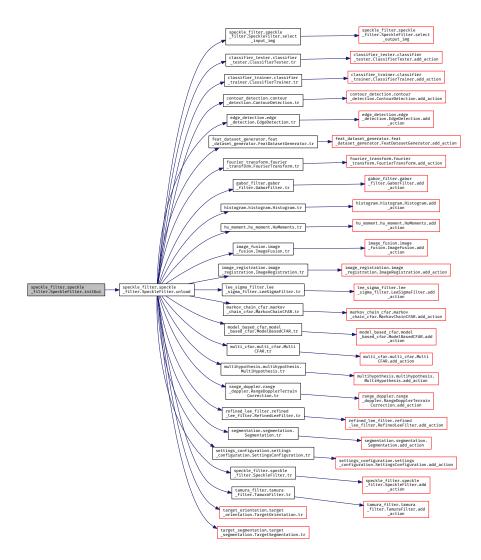
6.21.3.2 addToCustomMenu()

```
def speckle_filter.speckleFilter.addToCustomMenu ( self \ )
```

6.21.3.3 initGui()

```
\label{lem:condition} \mbox{def speckle\_filter.speckleFilter.initGui (} \\ self \mbox{)}
```

Create the menu entries and toolbar icons inside the QGIS GUI.



6.21.3.4 run()

```
\label{eq:continuous} \mbox{def speckle\_filter.speckle\_filter.run (} \\ self \mbox{)}
```

Run method that performs all the real work.

6.21.3.5 select_input_img()

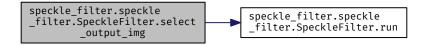
```
def speckle_filter.speckle_filter.SpeckleFilter.select_input_img ( self \ )
```

Here is the call graph for this function:



6.21.3.6 select_output_img()

```
def speckle_filter.speckle_filter.SpeckleFilter.select_output_img ( self )
```



6.21.3.7 tr()

Get the translation for a string using Qt translation API.

```
We implement this ourselves since we do not inherit QObject.

:param message: String for translation.

:type message: str, QString

:returns: Translated version of message.

:rtype: QString
```

Here is the call graph for this function:

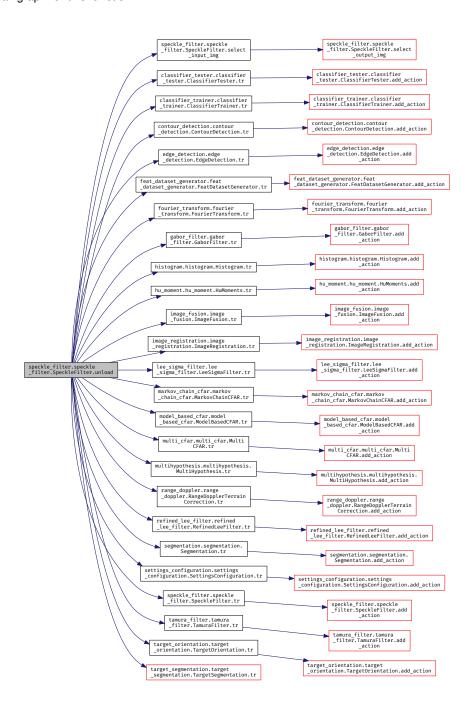


6.21.3.8 unload()

```
\label{lem:condition} \mbox{def speckle\_filter.speckle\_filter.unload (} \\ self \mbox{)}
```

Removes the plugin menu item and icon from QGIS GUI.

Here is the call graph for this function:



6.21.4 Member Data Documentation

6.21.4.1 action

speckle_filter.speckle_filter.SpeckleFilter.action

6.21.4.2 actions

speckle_filter.speckle_filter.SpeckleFilter.actions

6.21.4.3 arguments

 ${\tt speckle_filter.speckle_filter.SpeckleFilter.arguments}$

6.21.4.4 dlg

speckle_filter.speckle_filter.SpeckleFilter.dlg

6.21.4.5 first_start

speckle_filter.speckle_filter.SpeckleFilter.first_start

6.21.4.6 iface

 ${\tt speckle_filter.speckle_filter.SpeckleFilter.if} ace$

6.21.4.7 menu

speckle_filter.speckle_filter.SpeckleFilter.menu

6.21.4.8 output_dialog

 ${\tt speckle_filter.speckle_filter.SpeckleFilter.output_dialog}$

6.21.4.9 plugin_dir

 ${\tt speckle_filter.speckle_filter.SpeckleFilter.plugin_dir}$

6.21.4.10 subMenu

```
\verb|speckle_filter.speckle_filter.SpeckleFilter.subMenu|\\
```

6.21.4.11 translator

```
speckle_filter.speckle_filter.SpeckleFilter.translator
```

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

· speckle_filter.py

6.22 tamura_filter.tamura_filter.TamuraFilter Class Reference

QGIS Plugin Implementation.

Collaboration diagram for tamura_filter.tamura_filter.TamuraFilter:

```
tamura_filter.tamura
_filter.TamuraFilter
+ action
+ actions
+ arguments
+ dlg
+ first_start
+ iface
+ menu
+ output_dialog
+ plugin_dir
+ subMenu
+ translator
    init ()
+ add action()
+ addToCustomMenu()
+ display_bands()
+ initGui()
+ run()
+ tr()
+ unload()
```

Public Member Functions

- def __init__ (self, iface)
- def add_action (self, icon_path, text, callback, enabled_flag=True, add_to_menu=True, add_to_toolbar=True, status_tip=None, whats_this=None, parent=None)

Add a toolbar icon to the toolbar.

- def addToCustomMenu (self)
- def display_bands (self)
- def initGui (self)

Create the menu entries and toolbar icons inside the QGIS GUI.

· def run (self)

Run method that performs all the real work.

- def tr (self, message)
- def unload (self)

Removes the plugin menu item and icon from QGIS GUI.

Public Attributes

- · action
- · actions
- · arguments
- dlg
- first_start
- iface
- menu
- output_dialog
- plugin_dir
- subMenu
- · translator

6.22.1 Detailed Description

QGIS Plugin Implementation.

6.22.2 Constructor & Destructor Documentation

6.22.3 Member Function Documentation

6.22.3.1 add_action()

Add a toolbar icon to the toolbar.

```
:param icon_path: Path to the icon for this action. Can be a resource
   path (e.g. ':/plugins/foo/bar.png') or a normal file system path.
:type icon_path: str
:param text: Text that should be shown in menu items for this action.
:type text: str
:param callback: Function to be called when the action is triggered.
:type callback: function
:param enabled_flag: A flag indicating if the action should be enabled
   by default. Defaults to True.
:type enabled_flag: bool
:param add_{to}_menu: Flag indicating whether the action should also
   be added to the menu. Defaults to True.
:type add_to_menu: bool
:param add_to_toolbar: Flag indicating whether the action should also
   be added to the toolbar. Defaults to True.
:type add_to_toolbar: bool
:param status_tip: Optional text to show in a popup when mouse pointer
   hovers over the action.
:type status_tip: str
:param parent: Parent widget for the new action. Defaults None.
:type parent: QWidget
:param whats_this: Optional text to show in the status bar when the
   mouse pointer hovers over the action.
:returns: The action that was created. Note that the action is also
   added to self.actions list.
:rtype: QAction
```



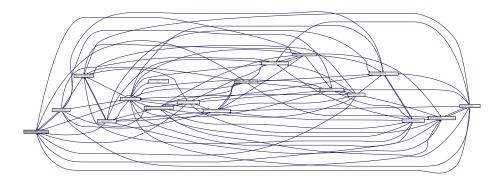
6.22.3.2 addToCustomMenu()

```
\label{lem:condition} \mbox{def tamura\_filter.tamura\_filter.TamuraFilter.addToCustomMenu (} \\ self \mbox{)}
```

6.22.3.3 display_bands()

```
def tamura_filter.tamura_filter.TamuraFilter.display_bands ( self \ )
```

Here is the call graph for this function:

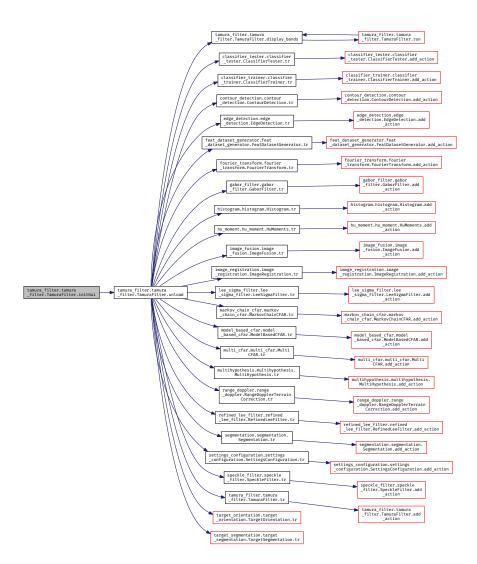


6.22.3.4 initGui()

```
def tamura_filter.tamura_filter.TamuraFilter.initGui ( self\ )
```

Create the menu entries and toolbar icons inside the QGIS GUI.

Here is the call graph for this function:

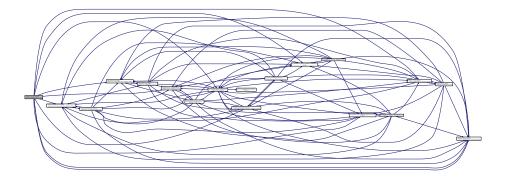


6.22.3.5 run()

```
\label{lem:condition} \mbox{def tamura\_filter.tamura\_filter.TamuraFilter.run (} \\ self )
```

Run method that performs all the real work.

Here is the call graph for this function:



6.22.3.6 tr()

Here is the call graph for this function:

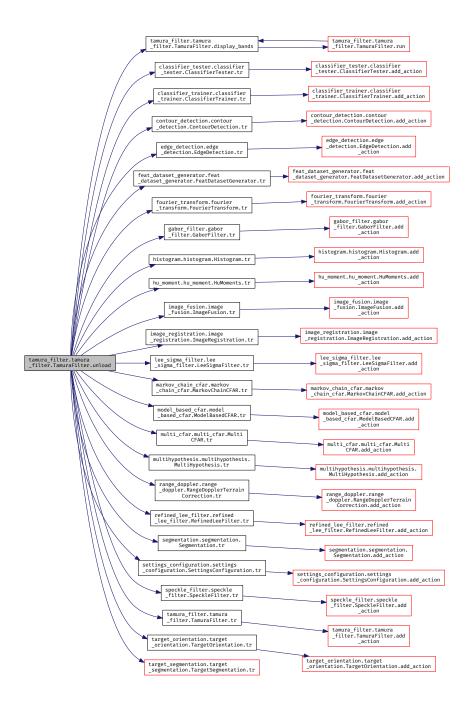


6.22.3.7 unload()

```
\label{eq:continuous} \mbox{def tamura\_filter.tamura\_filter.TamuraFilter.unload (} \\ self \mbox{)}
```

Removes the plugin menu item and icon from QGIS GUI.

Here is the call graph for this function:



6.22.4 Member Data Documentation

6.22.4.1 action

tamura_filter.tamura_filter.TamuraFilter.action

6.22.4.2 actions

tamura_filter.tamura_filter.TamuraFilter.actions

6.22.4.3 arguments

tamura_filter.tamura_filter.TamuraFilter.arguments

6.22.4.4 dlg

tamura_filter.tamura_filter.TamuraFilter.dlg

6.22.4.5 first_start

tamura_filter.tamura_filter.TamuraFilter.first_start

6.22.4.6 iface

 $\verb|tamura_filter.tamura_filter.TamuraFilter.iface|$

6.22.4.7 menu

tamura_filter.tamura_filter.TamuraFilter.menu

6.22.4.8 output_dialog

tamura_filter.tamura_filter.TamuraFilter.output_dialog

6.22.4.9 plugin_dir

 $tamura_filter.tamura_filter.TamuraFilter.plugin_dir$

6.22.4.10 subMenu

```
tamura_filter.tamura_filter.TamuraFilter.subMenu
```

6.22.4.11 translator

```
tamura_filter.tamura_filter.TamuraFilter.translator
```

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

tamura_filter.py

6.23 target_orientation.target_orientation.TargetOrientation Class Reference

QGIS Plugin Implementation.

Collaboration diagram for target orientation.target orientation.TargetOrientation:

```
target_orientation.target
_orientation.TargetOrientation
+ action
+ actions
+ arguments
+ dlg
+ first_start
+ iface
+ menu
+ output_dialog
+ plugin_dir
+ subMenu
+ translator
    init ()
+ add_action()
+ addToCustomMenu()
+ initGui()
+ run()
+ tr()
+ unload()
```

Public Member Functions

- def __init__ (self, iface)
- def add_action (self, icon_path, text, callback, enabled_flag=True, add_to_menu=True, add_to_toolbar=True, status_tip=None, whats_this=None, parent=None)

Add a toolbar icon to the toolbar.

- def addToCustomMenu (self)
- def initGui (self)

Create the menu entries and toolbar icons inside the QGIS GUI.

• def run (self)

Run method that performs all the real work.

• def tr (self, message)

Get the translation for a string using Qt translation API.

def unload (self)

Removes the plugin menu item and icon from QGIS GUI.

Public Attributes

- action
- · actions
- arguments
- dlg
- · first start
- iface
- menu
- output_dialog
- plugin_dir
- subMenu
- translator

6.23.1 Detailed Description

QGIS Plugin Implementation.

6.23.2 Constructor & Destructor Documentation

6.23.3 Member Function Documentation

6.23.3.1 add_action()

Add a toolbar icon to the toolbar.

```
:param icon_path: Path to the icon for this action. Can be a resource
   path (e.g. ':/plugins/foo/bar.png') or a normal file system path.
:type icon_path: str
:param text: Text that should be shown in menu items for this action.
:type text: str
:param callback: Function to be called when the action is triggered.
:type callback: function
:param enabled_flag: A flag indicating if the action should be enabled
   by default. Defaults to True.
:type enabled_flag: bool
:param add_to_menu: Flag indicating whether the action should also
   be added to the menu. Defaults to True.
:type add_to_menu: bool
:param add_to_toolbar: Flag indicating whether the action should also
   be added to the toolbar. Defaults to True.
:type add_to_toolbar: bool
:param status_tip: Optional text to show in a popup when mouse pointer
   hovers over the action.
:type status_tip: str
:param parent: Parent widget for the new action. Defaults None.
:type parent: QWidget
:param whats_this: Optional text to show in the status bar when the
   mouse pointer hovers over the action.
:returns: The action that was created. Note that the action is also
   added to self.actions list.
:rtype: QAction
```



6.23.3.2 addToCustomMenu()

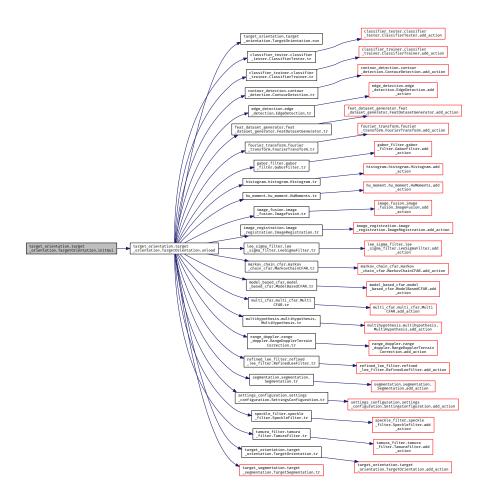
```
\label{target_orientation} \verb| def target_orientation.targetOrientation.addToCustomMenu ( | self |)
```

6.23.3.3 initGui()

```
def target_orientation.target_orientation.TargetOrientation.initGui ( self \ )
```

Create the menu entries and toolbar icons inside the QGIS GUI.

Here is the call graph for this function:



6.23.3.4 run()

```
def target_orientation.target_orientation.TargetOrientation.run ( self )
```

Run method that performs all the real work.

6.23.3.5 tr()

```
def target_orientation.target_orientation.TargetOrientation.tr ( self, \\ message \ )
```

Get the translation for a string using Qt translation API.

```
We implement this ourselves since we do not inherit QObject.

:param message: String for translation.

:type message: str, QString

:returns: Translated version of message.

:rtype: QString
```

Here is the call graph for this function:

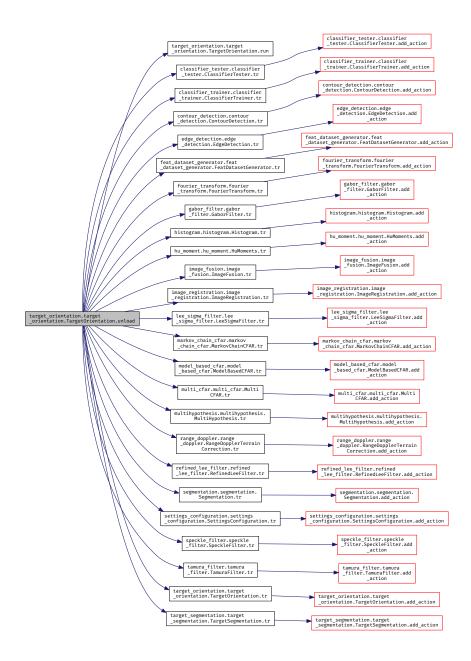


6.23.3.6 unload()

```
\label{lem:continuous} \mbox{def target\_orientation.target\_orientation.TargetOrientation.unload (} \\ self \mbox{)}
```

Removes the plugin menu item and icon from QGIS GUI.

Here is the call graph for this function:



6.23.4 Member Data Documentation

6.23.4.1 action

target_orientation.target_orientation.TargetOrientation.action

6.23.4.2 actions

 ${\tt target_orientation.target_orientation.TargetOrientation.actions}$

6.23.4.3 arguments

 $target_orientation.target_orientation.TargetOrientation.arguments$

6.23.4.4 dlg

 ${\tt target_orientation.target_orientation.TargetOrientation.dlg}$

6.23.4.5 first_start

target_orientation.target_orientation.TargetOrientation.first_start

6.23.4.6 iface

 ${\tt target_orientation.target_orientation.TargetOrientation.if} ace$

6.23.4.7 menu

 $\verb|target_orientation.target_orientation.TargetOrientation.menu|\\$

6.23.4.8 output_dialog

 ${\tt target_orientation.target_orientation.TargetOrientation.output_dialog}$

6.23.4.9 plugin_dir

 ${\tt target_orientation.target_orientation.TargetOrientation.plugin_dir}$

6.23.4.10 subMenu

target_orientation.target_orientation.TargetOrientation.subMenu

6.23.4.11 translator

target_orientation.target_orientation.TargetOrientation.translator

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

· target_orientation.py

6.24 target_segmentation.target_segmentation.TargetSegmentation Class Reference

QGIS Plugin Implementation.

Collaboration diagram for target segmentation.target segmentation. Target Segmentation:

```
target segmentation.target
_segmentation.TargetSegmentation
+ action
+ actions
+ arguments
+ dlg
+ first_start
+ iface
+ menu
+ output_dialog
+ plugin_dir
+ subMenu
+ translator
   init ()
+ add_action()
+ addToCustomMenu()
+ initGui()
+ run()
+ tr()
+ unload()
```

Public Member Functions

- def __init__ (self, iface)
- def add_action (self, icon_path, text, callback, enabled_flag=True, add_to_menu=True, add_to_toolbar=True, status_tip=None, whats_this=None, parent=None)

Add a toolbar icon to the toolbar.

- def addToCustomMenu (self)
- def initGui (self)

Create the menu entries and toolbar icons inside the QGIS GUI.

• def run (self)

Run method that performs all the real work.

• def tr (self, message)

Get the translation for a string using Qt translation API.

def unload (self)

Removes the plugin menu item and icon from QGIS GUI.

Public Attributes

- action
- · actions
- · arguments
- dlg
- · first start
- iface
- menu
- output_dialog
- plugin_dir
- subMenu
- translator

6.24.1 Detailed Description

QGIS Plugin Implementation.

6.24.2 Constructor & Destructor Documentation

6.24.3 Member Function Documentation

6.24.3.1 add_action()

Add a toolbar icon to the toolbar.

```
:param icon_path: Path to the icon for this action. Can be a resource
   path (e.g. ':/plugins/foo/bar.png') or a normal file system path.
:type icon_path: str
:param text: Text that should be shown in menu items for this action.
:type text: str
:param callback: Function to be called when the action is triggered.
:type callback: function
:param enabled_flag: A flag indicating if the action should be enabled
   by default. Defaults to True.
:type enabled_flag: bool
:param add_{to}_menu: Flag indicating whether the action should also
   be added to the menu. Defaults to True.
:type add_to_menu: bool
:param add_to_toolbar: Flag indicating whether the action should also
   be added to the toolbar. Defaults to True.
:type add_to_toolbar: bool
:param status_tip: Optional text to show in a popup when mouse pointer
   hovers over the action.
:type status_tip: str
:param parent: Parent widget for the new action. Defaults None.
:type parent: QWidget
:param whats_this: Optional text to show in the status bar when the
   mouse pointer hovers over the action.
:returns: The action that was created. Note that the action is also
   added to self.actions list.
:rtype: QAction
```

```
target_segmentation.target
_segmentation.TargetSegmentation.add_action

target_segmentation.targetSegmentation.add
ToCustomMenu
```

6.24.3.2 addToCustomMenu()

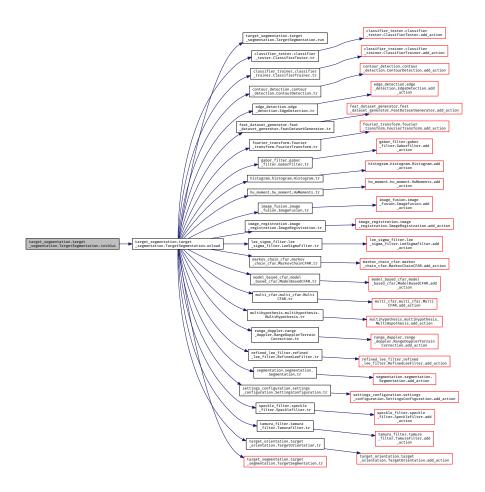
```
def target_segmentation.target_segmentation.TargetSegmentation.addToCustomMenu ( self \ )
```

6.24.3.3 initGui()

```
def target_segmentation.target_segmentation.TargetSegmentation.initGui ( self )
```

Create the menu entries and toolbar icons inside the QGIS GUI.

Here is the call graph for this function:



6.24.3.4 run()

```
def target_segmentation.target_segmentation.TargetSegmentation.run ( self \ )
```

Run method that performs all the real work.

6.24.3.5 tr()

```
def target_segmentation.target_segmentation.TargetSegmentation.tr ( self, \\ message \ )
```

Get the translation for a string using Qt translation API.

```
We implement this ourselves since we do not inherit QObject.

:param message: String for translation.

:type message: str, QString

:returns: Translated version of message.

:rtype: QString
```

Here is the call graph for this function:

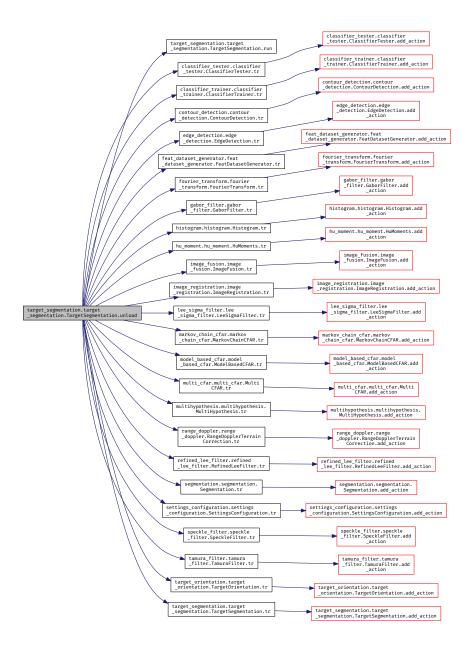


6.24.3.6 unload()

```
\label{lem:continuous} \mbox{def target\_segmentation.target\_segmentation.TargetSegmentation.unload (} \\ self \mbox{)}
```

Removes the plugin menu item and icon from QGIS GUI.

Here is the call graph for this function:



6.24.4 Member Data Documentation

6.24.4.1 action

 $\verb|target_segmentation.target_segmentation.TargetSegmentation.action|\\$

6.24.4.2 actions

 $\verb|target_segmentation.target_segmentation.TargetSegmentation.actions|$

6.24.4.3 arguments

 ${\tt target_segmentation.target_segmentation.TargetSegmentation.arguments}$

6.24.4.4 dlg

 $\verb|target_segmentation.target_segmentation.TargetSegmentation.dlg|$

6.24.4.5 first_start

target_segmentation.target_segmentation.TargetSegmentation.first_start

6.24.4.6 iface

 $\verb|target_segmentation.target_segmentation.TargetSegmentation.if ace|\\$

6.24.4.7 menu

 $\verb|target_segmentation.target_segmentation.TargetSegmentation.menu|\\$

6.24.4.8 output_dialog

 $\verb|target_segmentation.target_segmentation.TargetSegmentation.output_dialog| \\$

6.24.4.9 plugin_dir

 $\verb|target_segmentation.target_segmentation.TargetSegmentation.plugin_dir|\\$

6.24.4.10 subMenu

 $\verb|target_segmentation.target_segmentation.TargetSegmentation.subMenu|\\$

6.24.4.11 translator

 $\verb|target_segmentation.target_segmentation.TargetSegmentation.translator|\\$

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

• target_segmentation.py

Chapter 7

File Documentation

7.1 classifier_tester.py File Reference

Classes

class classifier_tester.classifier_tester.ClassifierTester
 QGIS Plugin Implementation.

Namespaces

· classifier_tester.classifier_tester

7.2 classifier_trainer.py File Reference

Classes

class classifier_trainer.classifier_trainer.ClassifierTrainer
 QGIS Plugin Implementation.

Namespaces

· classifier_trainer.classifier_trainer

7.3 contour_detection.py File Reference

Classes

• class contour_detection.contour_detection.ContourDetection QGIS Plugin Implementation. 206 File Documentation

Namespaces

• contour_detection.contour_detection

7.4 edge_detection.py File Reference

Classes

• class edge_detection.edge_detection.EdgeDetection QGIS Plugin Implementation.

Namespaces

• edge_detection.edge_detection

7.5 feat dataset generator.py File Reference

Classes

class feat_dataset_generator.feat_dataset_generator.FeatDatasetGenerator
 QGIS Plugin Implementation.

Namespaces

• feat_dataset_generator.feat_dataset_generator

7.6 fourier_transform.py File Reference

Classes

• class fourier_transform.fourier_transform.FourierTransform QGIS Plugin Implementation.

Namespaces

• fourier_transform.fourier_transform

7.7 gabor_filter.py File Reference

Classes

class gabor_filter.gabor_filter.GaborFilter
 QGIS Plugin Implementation.

Namespaces

· gabor_filter.gabor_filter

7.8 histogram.py File Reference

Classes

class histogram.histogram.Histogram
 QGIS Plugin Implementation.

Namespaces

· histogram.histogram

7.9 hu_moment.py File Reference

Classes

• class hu_moment.hu_moment.HuMoments QGIS Plugin Implementation.

Namespaces

• hu_moment.hu_moment

7.10 image_fusion.py File Reference

Classes

• class image_fusion.image_fusion.ImageFusion

QGIS Plugin Implementation.

Namespaces

• image_fusion.image_fusion

7.11 image_registration.py File Reference

Classes

class image_registration.image_registration.ImageRegistration
 QGIS Plugin Implementation.

208 File Documentation

Namespaces

· image_registration.image_registration

7.12 lee_sigma_filter.py File Reference

Classes

class lee_sigma_filter.lee_sigma_filter.LeeSigmaFilter
 QGIS Plugin Implementation.

Namespaces

• lee_sigma_filter.lee_sigma_filter

7.13 markov_chain_cfar.py File Reference

Classes

class markov_chain_cfar.markov_chain_cfar.MarkovChainCFAR
 QGIS Plugin Implementation.

Namespaces

• markov_chain_cfar.markov_chain_cfar

7.14 model_based_cfar.py File Reference

Classes

class model_based_cfar.model_based_cfar.ModelBasedCFAR
 QGIS Plugin Implementation.

Namespaces

• model_based_cfar.model_based_cfar

7.15 multi_cfar.py File Reference

Classes

class multi_cfar.multi_cfar.MultiCFAR
 QGIS Plugin Implementation.

Namespaces

• multi_cfar.multi_cfar

7.16 multihypothesis.py File Reference

Classes

• class multihypothesis.multihypothesis.MultiHypothesis QGIS Plugin Implementation.

Namespaces

· multihypothesis.multihypothesis

7.17 range_doppler.py File Reference

Classes

class range_doppler.range_doppler.RangeDopplerTerrainCorrection
 QGIS Plugin Implementation.

Namespaces

• range_doppler.range_doppler

7.18 README.md File Reference

7.19 refined lee filter.py File Reference

Classes

class refined_lee_filter.refined_lee_filter.RefinedLeeFilter
 QGIS Plugin Implementation.

Namespaces

• refined_lee_filter.refined_lee_filter

210 File Documentation

7.20 segmentation.py File Reference

Classes

class segmentation.segmentation.
 QGIS Plugin Implementation.

Namespaces

· segmentation.segmentation

7.21 settings_configuration.py File Reference

Classes

• class settings_configuration.settings_configuration.SettingsConfiguration QGIS Plugin Implementation.

Namespaces

• settings_configuration.settings_configuration

7.22 speckle_filter.py File Reference

Classes

class speckle_filter.speckle_filter.SpeckleFilter
 QGIS Plugin Implementation.

Namespaces

• speckle_filter.speckle_filter

7.23 tamura_filter.py File Reference

Classes

class tamura_filter.tamura_filter.TamuraFilter
 QGIS Plugin Implementation.

Namespaces

tamura_filter.tamura_filter

7.24 target_orientation.py File Reference

Classes

• class target_orientation.target_orientation.TargetOrientation QGIS Plugin Implementation.

Namespaces

• target_orientation.target_orientation

7.25 target_segmentation.py File Reference

Classes

• class target_segmentation.target_segmentation.TargetSegmentation QGIS Plugin Implementation.

Namespaces

• target_segmentation.target_segmentation

212 File Documentation