multiscale::analysis
::Detector

avgClusterednessDegree
avgDensity
image
outputFilepath
debugMode
outputImage
detectMethodCalled
detectorSpecificFieldsInitialised
origin
OUTPUT_CLUSTEREDNESS
OUTPUT_DENSITY
ERR_OUTPUT_WITHOUT
_DETECT
ERR_OUTPUT_FILE
ERR_INVALID_IMAGE
CSV_EXTENSION
IMG_EXTENSION
XML_EXTENSION
WIN_OUTPUT_IMAGE
KEY_ESC
KEY_SAVE
LABEL_ATTRIBUTE
LABEL_COMMENT
LABEL_COMMENT_CONTENTS
LABEL_EXPERIMENT_TIMEPOINT
_NUMERIC_STATE_VARIABLE
LABEL_EXPERIMENT_TIMEPOINT
_SPATIAL_ENTITY
LABEL_EXPERIMENT_TIMEPOINT
_NUMERIC_STATE_VARIABLE_NAME
LABEL_EXPERIMENT_TIMEPOINT
_NUMERIC_STATE_VARIABLE_VALUE
LABEL_SPATIAL_ENTITY
_PSEUDO_3D
LABEL_SPATIAL_ENTITY_TYPE
LABEL_SPATIAL_ENTITY
_CLUSTEREDNESS
LABEL_SPATIAL_ENTITY
_DENSITY
LABEL_SPATIAL_ENTITY_AREA
LABEL_SPATIAL_ENTITY
_PERIMETER
LABEL_SPATIAL_ENTITY
_DISTANCE_FROM_ORIGIN
LABEL_SPATIAL_ENTITY
_ANGLE_DEGREES
LABEL_SPATIAL_ENTITY
_SHAPE
LABEL_SPATIAL_ENTITY
_TRIANGLE_MEASURE
LABEL_SPATIAL_ENTITY
_RECTANGLE_MEASURE
LABEL_SPATIAL_ENTITY
_CIRCLE_MEASURE
LABEL_SPATIAL_ENTITY
_CENTROID_X
LABEL_SPATIAL_ENTITY
_CENTROID_Y
LABEL_AVG_CLUSTEREDNESS
LABEL_AVG_DENSITY

+ Detector()
+ ~Detector()
+ detect()
+ outputResults()
# initialise()
# initialiseDetectorSpecific
FieldsIfNotSet()
# setDetectorSpecificFields
InitialisationFlag()
# initialiseDetectorSpecific
Fields()
# initialiseImageDependent
Fields()
# initialiseDetectorSpecific
ImageDependentFields()
# initialiseImageOrigin()
# isValidInputImage()
# getDetectorTypeAsString()
# detect()
# detectInDebugMode()
# detectInReleaseMode()
# polygonAngle()
# polygonAngle()
# minAreaRectCentre()
# findGoodPointsForAngle()
# findGoodIntersectionPoints()
# displayResultsInWindow()
# outputResultsToFile()
# outputResultsToImage()
# storeOutputImageOnDisk()
# outputResultsToCsvFile()
# outputResultsToCsvFile()
# outputSpatialEntitiesToCsvFile()
# outputAveragedMeasuresTo
CsvFile()
# outputResultsToXMLFile()
# outputResultsToXMLFile()
# addSpatialEntitiesToPropertyTree()
# addAverageMeasuresToPropertyTree()
# addNumericStateVariableTo
PropertyTree()
# constructPropertyTree()
# addSpatialEntityProperties
ToTree()
# addSpatialEntityTypeToPropertyTree()
# getCollectionOfSpatialEntity
Pseudo3D()
# processImageAndDetect()
# clearPreviousDetectionResults()
# createTrackbars()
# createTrackbarsWindow()
# createDetectorSpecificTrackbars()
# processPressedKeyRequest()
# displayImage()
# printOutputErrorMessage()

multiscale::analysis
::RegionDetector

- alpha
- beta
- blurKernelSize
- morphologicalCloseIterations
- epsilon
- regionAreaThresh
- thresholdValue
- regions
- DETECTOR_TYPE
- TRACKBAR_ALPHA
- TRACKBAR_BETA
- TRACKBAR_KERNEL
- TRACKBAR_MORPH
- TRACKBAR_CANNY
- TRACKBAR_EPSILON
- TRACKBAR_REGION_AREA
_THRESH
- TRACKBAR_THRESHOLD
- USE_CANNY_L2
- CONTOUR_AREA_ORIENTED
- ALPHA_REAL_MIN
- ALPHA_REAL_MAX
- BETA_REAL_MIN
- BETA_REAL_MAX
- ALPHA_MAX
- BETA_MAX
- KERNEL_MAX
- MORPH_ITER_MAX
- CANNY_THRESH_MAX
- EPSILON_MAX
- REGION_AREA_THRESH_MAX
- THRESHOLD_MAX
- THRESHOLD_CLUSTEREDNESS
- INTENSITY_MAX
- POLYGON_CLOSED
- DISPLAY_LINE_THICKNESS

+ RegionDetector()
+ ~RegionDetector()
+ getAlpha()
+ getBeta()
+ getBlurKernelSize()
+ getEpsilon()
+ getMorphologicalCloseIterations()
+ getOriginXCoordinate()
+ getOriginYCoordinate()
+ getRegionAreaThresh()
+ getThresholdValue()
+ getRegions()
+ setAlpha()
+ setBeta()
+ setBlurKernelSize()
+ setEpsilon()
+ setMorphologicalCloseIterations()
+ setOriginXCoordinate()
+ setOriginYCoordinate()
+ setRegionAreaThresh()
+ setThresholdValue()
- initialiseDetectorSpecific
Fields()
- initialiseDetectorSpecific
ImageDependentFields()
- createDetectorSpecificTrackbars()
- getDetectorTypeAsString()
- processImageAndDetect()
- changeContrastAndBrightness()
- smoothImage()
- morphologicalClose()
- thresholdImage()
- findRegions()
- computeAverageMeasures()
- computeAverageClusteredness
Degree()
- computeAverageDensity()
- findContoursInImage()
- createRegionFromPolygon()
- isValidRegion()
- regionClusterednessDegree()
- regionDensity()
- regionArea()
- regionHolesArea()
- clearPreviousDetectionResults()
- getCollectionOfSpatialEntity
Pseudo3D()
- outputResultsToImage()
- convertAlpha()
- convertBeta()