```
# 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
                 and 20 more...
+ Detector()
+ ~Detector()
+ detect()
+ outputResults()
# initialise()
# initialiseDetectorSpecificFieldsIfNotSet()
# setDetectorSpecificFieldsInitialisationFlag()
# initialiseDetectorSpecificFields()
# initialiseImageDependentFields()
# initialiseDetectorSpecificImageDependentFields()
# initialiseImageOrigin()
# isValidInputImage()
# detect()
# detectInDebugMode()
                 and 29 more...
                       Δ
      multiscale::analysis::ClusterDetector
      # entityPileupDegree
      # eps
      # minPoints
      # clusters
      TRACKBAR_EPS

    TRACKBAR_MINPOINTS

      MIN_POINTS_MIN
      MIN_POINTS_MAX
      - EPS MIN
      - EPS_MAX
      - EPS_REAL_MIN
      - EPS_REAL_MAX
      + ClusterDetector()
      + ~ClusterDetector()
      + getEps()
      + getMinPoints()
      + getClusters()
      + setEps()
      + setMinPoints()
      # initialiseDetectorSpecificFields()
      # createDetectorSpecificTrackbars()
      # clearPreviousDetectionResults()
      # processImageAndDetect()
      # detectEntitiesInImage()
      # detectAndAnalyseClusters()
      # detectClusters()
      # convertEntities()
      # convertNonPiledUpEntities()
      # convertPiledUpEntities()
                  and 9 more...
                       Δ
 multiscale::analysis::SimulationClusterDetector
- thresholdedImage

    height

    width

- entityHeight

    entityWidth

- THRESHOLD
- THRESHOLD_MAX
- ENTITY_THRESH
- DATAPOINT_WIDTH
DATAPOINT_THICKNESS
+ SimulationClusterDetector()
+ ~SimulationClusterDetector()

    initialiseDetectorSpecificImageDependentFields()

    initialiseThresholdedImage()

    detectEntitiesInImage()

isEntityAtPosition()
- getEntityCentrePoint()
getEntityContourPoints()

    computePileUpDegreeAtPosition()

- outputResultsToImage()
- outputClusterToImage()
outputClusterShape()
- outputClusterTriangularShape()

    outputClusterRectangularShape()
```

- outputClusterCircularShape()

multiscale::analysis::Detector

# avgClusterednessDegree

# avgDensity