UML_Class_Diagram_V2

Final Group 4 | December 7th, 2019

StateMachine

-imageDebris:Point
-imageAnalysis:ImageAnalysis
-orientation:double
-depth:double
-x:double
-y:double
-lastSnapshot:Mat
-nh:NodeHandle
-pub:Publisher
-imgSub:Subscriber
-odomSub:Subscriber

+StateMachine()
+imageRGBCallback(const ImageConstPtr&)
+odometryCallback(const ConstPtr&)
+depthCallback(const ImageConstPtr&)
+readDepthData(unsigned int, unsigned int):double
+pickupDebris()

Point

-x:double
-y:double

+getX():double
+getY():double
+Point(double, double)

ImageAnalysis

+imageDebrisLocation:Point

+ImageAnalysis()
+getRotationalAngle(double, double):double
+filter(Mat):Mat
+detectDebris(Mat)
+getDebrisLocation():Point