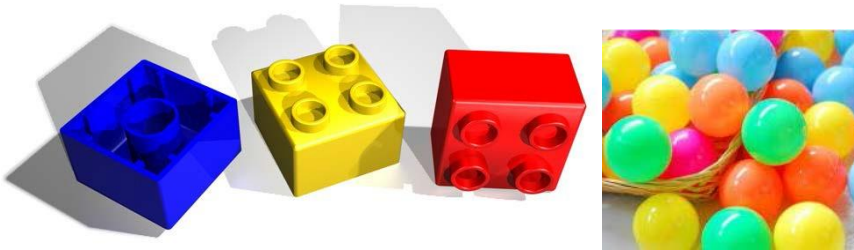


Assignment 5 MINES-VIS

This Assignment will be graded. So hand in your work on time.

You must hand in a well-documented source code. (Clearly commented explanation of the functions between the C++ code)

What you need for this assignment: videostreams with the colored objects. See Canvas.



Task 1 Fast Object Tracking

Pick your preferred color object. Develop a Fast Object Tracking application using the OpenCV.

Give a demonstration of your application which is tracking the colored object that you have chosen.

The centroid of your selected object should be marked with a X and the coordinates should be displayed also on screen. You might use “SingleColors.mp4”

Task 2:

Choose a non-circle colored object, see “MeasuringAngle.mp4” and determine the orientation θ of that particular object.

Read paragraph 3.3.2 Orientation of the document “Simple Image Analysis by Moments.pdf” for more information. Give a demo of your app.

Task 3 Tracking and classifying multiple colored objects.

Modify your application in such a way that you can now track each objects (the collection of the colored object chosen by you.) and classify them. Each object must be marked with a box or circle. Use “MultipleColors.mp4”

Discuss your results!! (for extra credits)

A demo presentation of your applications is mandatory!

Assignment must be handed in before Tuesday October the xxth 2016 with a Demo presentation!