



Input Image

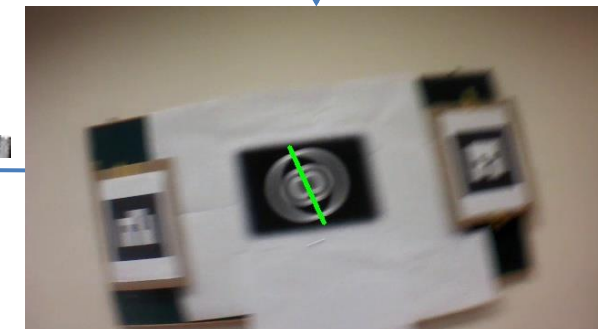
Gabor Filter

Step 1



Clustering

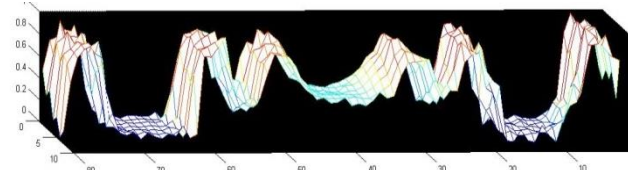
Step 2



PCA to determine
dominate direction

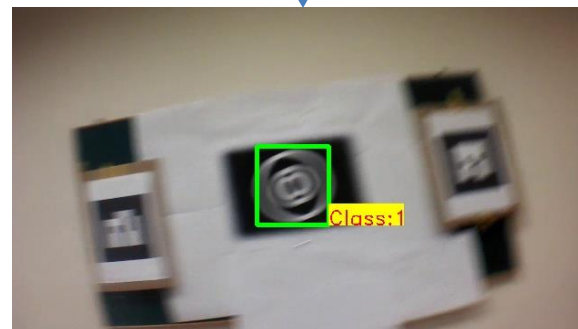
Step 3

Detected Intensity Profile



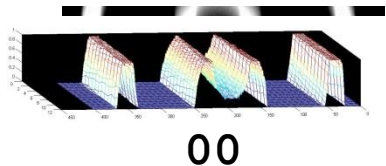
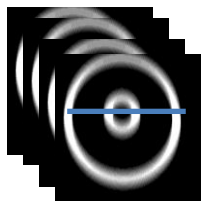
K-NN Classifier

Step 4

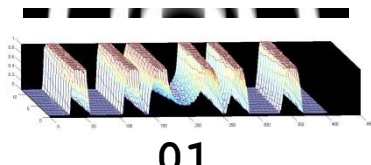
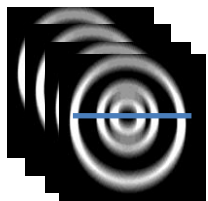


Final Output
with Code ID

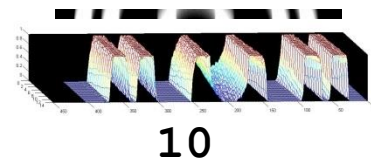
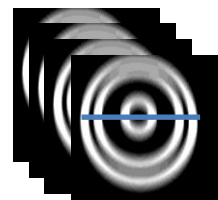
Fiducial Codes Training Data



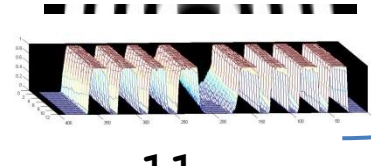
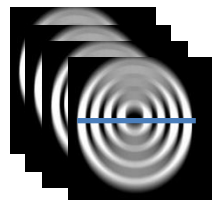
00



01



10



11