

## Recognition Algorithm Pipeline



1.) Taking the Picture



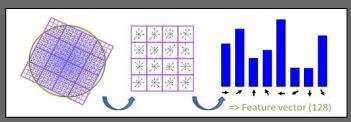
2.) Find contours and Region of Interest.



3.) Use Otsu Binarization



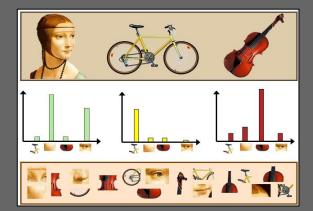
5.) Compute Feature Descriptors



4.) GrabCut Algorithm for Background-Foreground-Subtraction



6.) Bag of Words Model + K-means Clustering of Features to Construct a Sparse Histogram



7.) Clusters Frequencies as Input to an Artificial Neural Network for Classification

