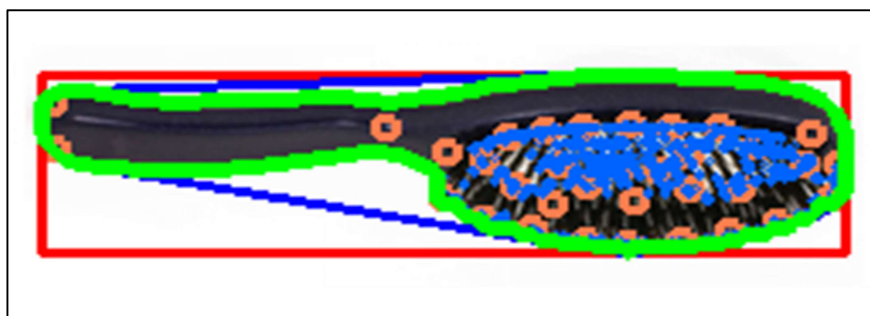


Features Legend	
Light Blue	Corner - Harrist
Orange	Corner - good feature to track
Red	Rectangle with from the biggest contour
Blue (line)	Hull Area
Green	Area Approximation

Feature Extracted	Note
<code>n_corner'</code>	number of corner from good feature to track
<code>n_h_corner'</code>	number of corner from harist corner
<code>n_contour'</code>	number of contour detected
<code>a_rect'</code>	area of rectangle (Red)
<code>a_hull'</code>	area of hull (Blue)
<code>a_approx'</code>	area of contour approximation
<code>l_perimeters'</code>	perimeter length
<code>wide/length'</code>	ratio of the rectangle wide and length
<code>perim/a_rect'</code>	ratio of the rectangle perimeter and rectangle area
<code>perim/a_hull'</code>	ratio of the rectangle perimeter and hull area
<code>perim/a_appx'</code>	ratio of the rectangle perimeter and area approximation
<code>corner/a_rect'</code>	ratio of the rectangle corner and rectangle area
<code>corner/a_hull'</code>	ratio of the rectangle corner and hull area
<code>corner/a_appx'</code>	ratio of the rectangle corner and area approximation
<code>corner/l_perim'</code>	ratio of the rectangle corner and perimeter length
<code>h_corner/a_rect'</code>	ratio of the rectangle corner harist and rectangle area
<code>h_corner/a_hull'</code>	ratio of the rectangle corner harist and hull area
<code>h_corner/a_appx'</code>	ratio of the rectangle corner harist and area approximation
<code>h_corner/l_perim'</code>	ratio of the rectangle corner harist and perimeter length
<code>extent'</code>	ratio of approximation area and rectangle area
<code>solidity'</code>	ratio of approximation area and hull area



	Accuracy	Precision	Recall	F1-Scores
Decision Tree	0.73	0.74	0.74	0.74
Random Forest	0.76	0.76	0.76	0.76
K-Nearest Neig	0.88	0.89	0.9	0.89
CNN	0.68	0.72	0.69	0.68

* we are using 800 images (400 - Brush and 400 - Comb) with 10% as test data

Note for CNN	
Batch	100
Epoch	400
Learning Rate	0.01
Loss Function	Stochastic Gradient Decent

