

CONTENT BASED IMAGE RETRIEVAL USING **SALIENT ORIENTED HISTOGRAM**

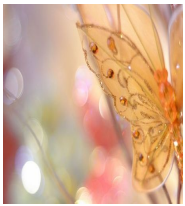
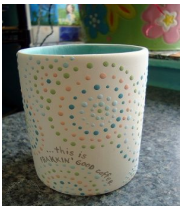



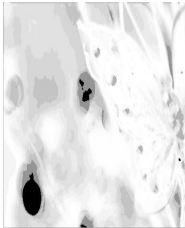







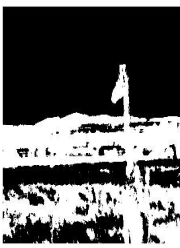

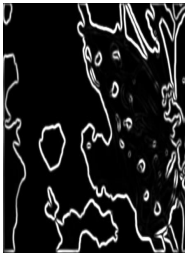




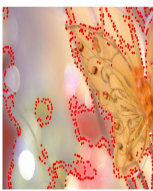

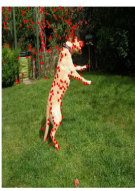


Report

Submitted by:

Sukanya Bhattacharjee (174050012)

Krunal Parmar (173059010)

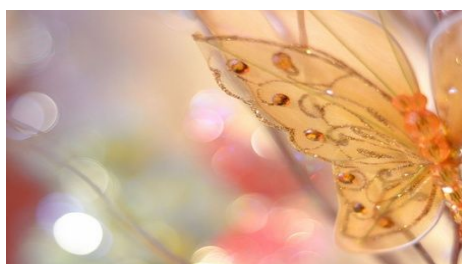
Sneha Bhakare (150050040)

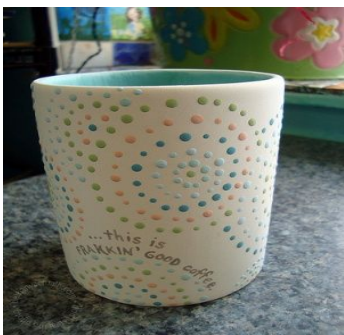
INPUT					
SALIENCY MAP					
MASK					
EDGE MAP					
HARRIS CORNER DETECTION BASED FEATURE POINTS					

MHEC BASED FEATURE POINTS					
------------------------------------	---	---	---	---	---

RETRIEVAL RESULTS:

SOH USING HARRIS FEATURE POINTS:



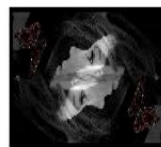








SOH USING MHEC FEATURE POINTS:











ACCURACY:

SOH USING HARRIS FEATURE POINTS:

DATABASE	AVERAGE		MAXIMUM	
	T50	T100	T50	T100
Butterfly	44.5	47.5	52	53
Coffee Mug	56.22	56.88	70	65
Dog Jump	58.71	58.57	78	80
Giraffe	21.71	21.28	30	28
Plane	56.5	63.08	76	76

SOH USING MHEC FEATURE POINTS:

DATABASE	AVERAGE		MAXIMUM	
	T50	T100	T50	T100
Butterfly	54.5	54.25	58	57
Coffee Mug	61.33	61	70	69
Dog Jump	68	68.14	76	74
Giraffe	31.42	29	40	35
Plane	72	70.08	80	78

OBSERVATIONS:

- The strength of this method lies in how much precise the mask computation is. We have tried both adaptive thresholding and grabcut for this purpose. Grabcut is an interactive method by which we can manually cut out the mask, thus giving better results. But in this case it is not possible as we have huge dataset. Thus, the accuracy is affected.
- Harris corner detector at times works better than MHEC as it selects only corner. So when the mask is not accurate, this reduces the error as compared to MHEC which selects the edges as well.