

Content Based Image Retrieval - Lab 7

Texture Analysis using Tamura

Name: Ayush Sharma

Reg. No: 15BCE1335

Faculty: Dr. Geetha S.

1) CBIR System using Tamura Features -

Get Following features -

- 1. Coarseness**
- 2. Contrast**
- 3. Directionality**
- 4. Line-likeness**
- 5. Regularity**
- 6. Roughness**

The features are compared using Manhattan distance.

(Code can be found in lab7_1.m in the attached rar file)

Output -

Query Image -



Result -



2) Get the feature values in excel

Get the feature vector space from the above code and then use `xlswrite` to write value to excel file

(Code can be found in `lab7_2.m` in the attached rar file)

Output –

1	FileName	Coarseness	Contrast	Directionality	Line-Likelihood	Regularity	Roughness
2	1	39.57182315	17.01828	2.967088347	0.965979008	0.637669933	56.59011
3	2	32.84819753	30.00149	0.762881892	0.692852443	0.883389734	62.84969
4	3	40.63340288	30.14356	0.081148745	0.598922572	1.143711069	70.77696
5	4	33.02539506	26.22987	1.794723439	0.739640397	0.746005557	59.25527
6	5	33.7509389	22.40413	0.50640487	0.845208955	0.725200541	56.15507
7	6	33.68083458	6.198613	0.572145997	0.935028689	0.241598657	39.87945
8	7	34.65460264	15.70962	0.006150973	0.734270593	0.533139178	50.36422
9	8	40.86450075	28.28046	0.738540043	0.936333926	1.080282766	69.14496
10	9	34.0327074	15.35737	0.862002949	0.920651521	0.535181854	49.39007
11	10	36.11730287	13.01535	0.766076047	0.939470625	0.47918132	49.13265
12	11	39.95751615	30.24437	0.556374736	0.911338162	1.150087943	70.20189
13	12	32.23327363	10.76265	0.885671033	0.891968127	0.343206835	42.99592
14	13	40.00266269	37.04004	0.009153711	0.848037193	1.336996707	77.0427
15	14	42.33996736	39.50361	0.707695978	0.954562807	1.462713355	81.84358
16	15	41.19011905	41.81653	0.888589457	0.850730856	1.542379144	83.00665
17	16	39.38575261	33.50326	1.734365961	0.747404566	1.157061681	72.88902
18	17	40.57121975	20.87838	0.022665014	0.956724164	0.871509649	61.4496
19	18	38.92840537	19.64764	0.837467227	0.949849313	0.760652712	58.57604
20	19	36.73247622	10.5739	0.570226656	0.944588534	0.464635602	47.30637
21	20	37.40162401	25.32802	0.568398879	0.870037533	0.925042365	62.72964
22	21	35.24721842	21.93005	0.559953532	0.794652311	0.755956272	57.17727
23	22	39.41392946	66.18183	0.705293774	0.833471967	2.171718003	105.5958
24	23	32.1911718	25.64298	0.005555378	0.671214939	0.754994415	57.83415

Sheet1

Sheet2

Sheet3

+