CS676A - Project Results

(Group 1)

Shubham Jain - 13683
Vikas Jain - 13788

Percentage correctly ordered pairs with RankNet and rich CNN features

Attribute	Acc.	Attribute	Acc.
Masculine	80.35	Bushy-eyebrows	80.81
Young	79.14	Pointy-nose	79.25
Chubby	69.68	Big-lips	88.25
Forehead	66.48	Round-face	83.66

Class Prediction from learned Probability Distribution

CNN features are used for images
RankNET with seen(1-8) and unseen(9-11):

	precision	recall	f1-score	support
1	0.80	0.33	0.47	24
2	0.91	0.20	0.33	49
3	1.00	0.86	0.92	14
4	0.89	1.00	0.94	8
5	0.75	0.36	0.49	25
6	0.83	0.71	0.77	14
7	0.85	0.61	0.71	18
8	0.92	1.00	0.96	12
9	0.03	0.08	0.05	13
10	0.00	0.00	0.00	0
11	0.10	0.60	0.17	5
avg / total	0.78	0.46	0.53	182

RankSVM without seen classes (1-8):

	precision	recall	f1-score	support
1	0.60	0.40	0.48	15
2	0.36	0.50	0.42	8
3	0.75	0.75	0.75	12
4	0.56	1.00	0.71	5
5	0.67	0.57	0.62	14
6	0.58	0.70	0.64	10
7	0.77	0.77	0.77	13
8	0.85	0.73	0.79	15
avg / total	0.67	0.65	0.65	92

RankSVM with seen(1-8) and unseen(9-11):

	precision	recall	f1-score	support
1	0.00	0.00	0.00	0
2	0.18	1.00	0.31	2
3	0.08	1.00	0.15	1
4	0.11	1.00	0.20	1
5	0.33	0.80	0.47	5
6	0.17	1.00	0.29	2
7	0.38	0.83	0.53	6
8	0.54	0.07	0.13	97
9	0.00	0.00	0.00	14
10	0.00	0.00	0.00	7
11	0.00	0.00	0.00	47
avg / total	0.31	0.12	0.11	182

You can clearly see that RankSVM is performing very poor with unseen indicating that there is a need to devise a better method for the finding the distribution.