The Supplemenatry for "Adaptively Weighted Multi-Task Deep Network for Person Attribute Classification"

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Methods	5 Shadow	Arched Eyebrows	Attractive	Bags Un. Eyes	Bald	Bangs	Big Lips	Big Nose	Black Hair	Blond Hair	Blurry	Brown Hair	Bushy Eyebrows	Chubby
FaceTracer [2]	85.0	76.0	78.0	76.0	89.0	88.0	64.0	74.0	70.0	80.0	81.0	60.0	80.0	86.0
PANDA-w [7]	82.0	73.0	77.0	71.0	92.0	89.0	61.0	70.0	74.0	81.0	77.0	69.0	76.0	82.0
PANDA-l [7]	88.0	78.0	81.0	79.0	96.0	92.0	67.0	75.0	85.0	93.0	86.0	77.0	86.0	86.0
LNets+ANet[4]	91.0	79.0	81.0	79.0	98.0	95.0	68.0	78.0	88.0	95.0	84.0	80.0	90.0	91.0
MT-RBM-PCA [1]	90.0	77.0	76.0	81.0	98.0	88.0	69.0	81.0	76.0	91.0	95.0	83.0	88.0	95.0
Off-the-Shelf CNN [8]	89.0	83.0	82.0	79.0	96.0	94.0	70.0	79.0	87.0	93.0	87.0	79.0	87.0	88.0
Walk and Learn[6]	84.0	87.0	84.0	87.0	92.0	96.0	78.0	91.0	84.0	92.0	91.0	81.0	93.0	89.0
Moon [5]	94.0	82.3	81.7	84.9	98.8	95.8	71.5	84.0	89.4	95.9	95.7	89.4	92.6	95.4
Separate Models	91.2	81.1	83.4	83.1	97.7	95.7	66.6	83.4	89.1	93.3	95.5	84.9	89.5	93.4
Basic Model	94.0	82.4	81.8	84.0	98.6	95.6	70.3	84.2	87.8	95.2	95.5	87.5	92.2	95.4
Our Model	94.9	84.6	83.3	85.6	99.1	96.3	71.6	85.0	90.7	96.2	96.2	89.8	93.3	95.8

Methods	Double Chin	Eyeglasses	Goatee	Gray Hair	Heavy Makeup	H. Cheekbones	Male	Mouth O.	Mustache	Narrow Eyes	No Beard	Oval Face	Pale Skin	Pointy Nose
FaceTracer [2]	88.0	98.0	93.0	90.0	85.0	84.0	91.0	87.0	91.0	82.0	90.0	64.0	83.0	68.0
PANDA-w [7]	85.0	94.0	86.0	88.0	84.0	80.0	93.0	82.0	83.0	79.0	87.0	62.0	84.0	65.0
PANDA-l [7]	88.0	98.0	93.0	94.0	90.0	86.0	97.0	93.0	93.0	84.0	93.0	65.0	91.0	71.0
LNets+ANet[4]	92.0	99.0	95.0	97.0	90.0	87.0	98.0	92.0	95.0	81.0	95.0	66.0	91.0	72.0
MT-RBM-PCA [1]	96.0	96.0	96.0	97.0	85.0	83.0	90.0	82.0	97.0	86.0	90.0	73.0	96.0	73.0
Off-the-Shelf CNN [8]	89.0	99.0	94.0	95.0	91.0	87.0	99.0	92.0	93.0	78.0	94.0	67.0	85.0	73.0
Walk and Learn[6]	93.0	97.0	92.0	95.0	96.0	95.0	96.0	97.0	90.0	79.0	90.0	79.0	85.0	77.0
Moon [5]	96.3	99.5	97.0	98.1	91.0	87.0	98.1	93.5	96.8	86.5	95.6	75.7	97.0	76.5
Separate Models	94.9	99.1	97.4	97.0	90.6	85.0	95.2	92.6	96.1	85.8	95.0	72.8	96.4	73.4
Basic Model	96.1	99.5	97.1	98.0	90.8	87.0	97.9	93.3	96.7	86.9	95.7	74.3	96.8	75.6
Our Model	96.5	99.7	97.6	98.4	92.1	88.2	98.5	94.3	97.0	87.3	96.6	76.7	97.1	78.0

Methods	Receding Hairline	Rosy Cheeks	Sideburns	Smiling	Straight Hair	Wavy Hair	Wearing Earrings	Wearing Hat	Wearing Lipstick	Wearing Necklace	Wearing Necktie	Young		Average
FaceTracer [2]	76.0	84.0	94.0	89.0	63.0	73.0	73.0	89.0	89.0	68.0	86.0	80.0		81.0
PANDA-w [7]	82.0	81.0	90.0	89.0	67.0	76.0	72.0	91.0	88.0	67.0	88.0	77.0		79.0
PANDA-l [7]	85.0	87.0	93.0	92.0	69.0	77.0	78.0	96.0	93.0	67.0	91.0	84.0		85.0
LNets+ANet[4]	89.0	90.0	96.0	92.0	73.0	80.0	82.0	99.0	93.0	71.0	93.0	87.0		87.0
MT-RBM-PCA [1]	92.0	94.0	96.0	88.0	80.0	72.0	81.0	97.0	89.0	87.0	94.0	81.0		87.0
Off-the-Shelf CNN [8]	87.0	88.0	95.0	92.0	73.0	79.0	82.0	96.0	93.0	73.0	91.0	86.0		86.6
Walk and Learn[6]	84.0	96.0	92.0	98.0	75.0	85.0	91.0	96.0	92.0	77.0	84.0	86.0		88.0
Moon [5]	93.6	94.8	97.6	92.6	82.3	82.5	89.6	98.9	93.9	87.0	96.6	88.1		90.9
Separate Models	91.5	92.0	97.5	92.1	81.1	81.9	87.7	98.7	94.1	86.8	97.4	85.5		89.6
Basic Model	93.0	94.1	97.7	92.3	79.8	80.9	89.1	99.0	91.9	86.3	95.6	87.8		90.4
Our Model	94.0	95.3	97.6	93.4	85.5	85.9	91.2	99.2	94.6	87.8	97.1	89.1		**91.8**

Table 1: Performance comparison with state of the art methods on CelebA on all 40 attributes.

Methods	gender	age	hair	L.slv	L.low	S.clth	B.pack	H.bag	bag	hat	C.up	C.low	mean
Ped_attrb_net [3]	83.88	85.93	83.74	91.45	93.17	91.73	76.44	94.12	72.11	75.88	87.52	88.32	86.19
APR [3]	85.78	87.68	83.46	94.12	92.64	91.36	86.32	91.33	76.01	88.21	89.73	91.32	88.16
Separate Models	86.68	66.78	81.44	93.53	92.83	90.81	81.86	90.53	75.23	97.13	93.97	93.06	86.68
Basic Model	84.19	69.08	84.54	93.44	92.35	91.26	80.80	88.60	72.61	97.13	94.61	93.55	86.84
Our Model	87.31	76.45	84.64	93.42	94.52	93.33	82.78	90.23	73.27	97.13	94.93	93.84	**88.49**

Table 2: Comparison of attribute prediction accuracy on Market1501-attribute. “L.slv”, “L.low”, “S.clth”, “B.pack”, “H.bag”, “C.up”, “C.low”denote length of sleeve, length of lower-body clothing, style of clothing, backpack, handbag, color of upper-body clothing and color of lower-body clothing, resp.

Methods	gender	hat	boots	L.up	B.pack	H.bag	bag	C.shoes	C.up	C.low	mean
Ped_attrb_net [3]	82.38	69.16	87.65	89.02	79.24	85.27	83.14	87.18	91.11	69.81	82.39
APR [3]	81.62	86.26	85.99	88.55	74.72	93.55	82.19	89.98	99.49	81.90	86.42
Separate Models	78.63	79.25	85.03	88.55	74.02	93.6	81.24	89.81	93.09	91.33	85.45
Basic Model	78.75	80.26	86.93	87.03	73.47	93.49	82.55	90.80	93.7	92.09	85.91
Our Model	82.62	86.83	88.67	87.81	75.44	93.60	83.17	91.23	93.72	92.18	**87.53**

Table 3: Comparison of attribute prediction accuracy on Duke-attribute. “C.shoes" denote color of shoes, and the other notations are the same with Table 2.