Supplementary file

Table I: The results of different networks on three benchmark datasets

Datasets	Methods	R_e	R_i	R_a	EP	ER	$EF1$	B_T
	MobileNetV2	0.5000	0.0000	0.5000	**0.5552**	**0.5138**	**0.4871**	0.5000
	MRDUI	**0.5000**	0.0000	**0.5000**	0.4871	0.5057	0.4836	**0.5000**
	DenseNet121	0.4779	0.0000	0.5221	**0.5529**	0.5012	0.4945	0.5221
	MRDUI	**0.4632**	0.0074	**0.5294**	0.5490	**0.5348**	**0.5054**	**0.5336**
	Resnet50	**0.4779**	0.0000	**0.5221**	**0.5946**	**0.5227**	**0.5179**	**0.5221**
	MRDUI	0.4853	0.0000	0.5147	0.5190	0.5126	0.4937	0.5147
Monkey	EfficientNetB0	0.5515	0.0000	0.4485	0.4537	0.4550	0.4333	0.4485
	MRDUI	**0.4559**	0.0000	**0.5441**	**0.5819**	**0.5549**	**0.5258**	**0.5441**
	ShuffleNetV2	0.5294	0.0000	0.4706	0.4814	0.4680	0.4616	0.4706
	MRDUI	**0.4412**	0.0000	**0.5588**	**0.5519**	**0.5606**	**0.5414**	**0.5588**
	SqueezeNet	0.5221	0.0000	0.4779	0.5426	0.4588	0.4602	0.4779
	MRDUI	**0.4412**	0.0368	**0.5220**	**0.5997**	**0.5223**	**0.5220**	**0.5432**
	Xception	0.8088	0.0000	0.1912	0.2017	0.2059	0.1775	0.1912
	MRDUI	**0.6838**	0.0000	**0.3162**	**0.5593**	**0.3109**	**0.2923**	**0.3162**
	SENet	0.4412	0.0000	0.5588	**0.5818**	0.5667	0.5428	0.5588
	MRDUI	**0.4412**	0.0000	**0.5588**	0.5266	0.5628	0.5171	**0.5588**
	MobileNetV2	0.4560	0.0000	0.5440	**0.6460**	0.5440	0.5225	0.5440
	MRDUI	**0.4200**	0.0080	**0.5720**	0.5699	**0.5720**	**0.5431**	**0.5766**
	DenseNet121	0.3400	0.0000	0.6600	0.7246	0.6600	0.6554	0.6600
	MRDUI	**0.2760**	0.0000	**0.7240**	**0.7445**	**0.7240**	**0.7110**	**0.7240**
	Resnet50	0.4440	0.0000	0.5560	**0.5966**	0.5560	**0.5346**	0.5560
	MRDUI	**0.4320**	0.0040	**0.5640**	0.5543	**0.5640**	0.5233	**0.5663**
Butterfly	EfficientNetB0	0.4240	0.0000	0.5760	0.6102	0.5760	0.5606	0.5760
	MRDUI	**0.3360**	0.0000	**0.6640**	**0.6916**	**0.6640**	**0.6505**	**0.6640**
	ShuffleNetV2	0.4040	0.0000	0.5960	0.6273	0.5960	0.5791	0.5960
	MRDUI	**0.3480**	0.0200	**0.6320**	**0.6606**	**0.6320**	**0.6196**	**0.6435**
	SqueezeNet	0.4960	0.0000	0.5040	0.5632	0.5040	0.4759	0.5040
	MRDUI	**0.4280**	0.0320	**0.5400**	**0.5800**	**0.5400**	**0.5163**	**0.5584**
	Xception	0.8560	0.0000	0.1440	0.1658	0.1440	0.1212	0.1400
	MRDUI	**0.7600**	0.0000	**0.2400**	**0.2508**	**0.2400**	**0.2029**	**0.2400**
	SENet	0.3320	0.0000	**0.6680**	0.7204	**0.6680**	**0.6595**	0.6680
	MRDUI	**0.3160**	0.0280	0.6560	0.7001	0.6560	0.6420	**0.6721**
	MobileNetV2	0.4158	0.0000	0.5842	0.5852	0.5841	0.5766	0.5842
	MRDUI	**0.3292**	0.0008	**0.6700**	**0.6759**	**0.6701**	**0.6695**	**0.6705**
	DenseNet121	0.3346	0.0000	0.6654	0.6815	0.6652	0.6670	0.6654
	MRDUI	**0.2734**	0.0126	**0.7140**	**0.7484**	**0.7135**	**0.7182**	**0.7212**
	Resnet50	0.5112	0.0000	0.4888	0.4984	0.4884	0.4850	0.4888
	MRDUI	**0.3596**	0.0002	**0.6402**	**0.6402**	**0.6402**	**0.6389**	**0.6403**
Cifar-10	EfficientNetB0	0.4102	0.0000	0.5898	0.6101	0.5900	0.5919	0.5898
	MRDUI	**0.3356**	0.0040	**0.6640**	**0.6667**	**0.6641**	**0.6642**	**0.6642**
	ShuffleNetV2	0.4374	0.0000	0.5626	0.5681	0.5620	0.5610	0.5626
	MRDUI	**0.3496**	0.0002	**0.6502**	**0.6648**	**0.6498**	**0.6515**	**0.6503**
	SqueezeNet	0.3782	0.0000	0.6218	**0.6355**	0.6212	**0.6190**	0.6218
	MRDUI	**0.3190**	0.0422	**0.6388**	0.6145	**0.6373**	0.6164	**0.6630**
	Xception	0.5004	0.0000	0.4996	0.5169	0.4987	0.4991	0.4996
	MRDUI	**0.3606**	0.0018	**0.6376**	**0.6468**	**0.6371**	**0.6403**	**0.6386**
	SENet	0.3706	0.0000	0.6294	0.6782	0.6283	0.6370	0.6294
	MRDUI	**0.2782**	0.0000	**0.7218**	**0.7371**	**0.7213**	**0.7214**	**0.7218**