

Table A1 Nomenclature

Symbol	Describe	Symbol	Describe
X_L	The labeled dataset	e_i	The entropy of x_i
X_U	The unlabeled dataset	p_{ij}	The posterior probability of x_i to class j
m	The number of variable	x_s	The selected unlabeled sample
n	The number of labeled sample	t	The threshold
G	The number of sub-classifier	x_{new}	The new observation sample
J	The number of class	C^g	The confusion matrix of the g^{th} sub-dataset
K_j	The number of subclass in class j	Confidence($i g$)	The confidence of i^{th} unlabeled sample in g^{th} sub-classifier
c_{jk}	The k^{th} subclass in j^{th} class	Deficiency($i g$)	The deficiency of i^{th} unlabeled sample in g^{th} sub-classifier
Π_j	The priori probability of j^{th} class	Error($i g$)	The prediction error of i^{th} unlabeled sample in g^{th} sub-classifier
π_{jk}	The priori probability of k^{th} subclass in j^{th} class	Value($i g$)	The value of i^{th} unlabeled sample in g^{th} sub-classifier
μ_{jk}	The mean of k^{th} subclass in j^{th} class	P_x	The posterior probability matrix of x^{th} labeled sample
Σ_{jk}	The variance of k^{th} subclass in j^{th} class	PL	The series of posterior probability matrices of all labeled sample
x_i	The i^{th} sample	P_{new}	The posterior probability matrix of x_{new}
θ	Parameter set of MDA	D_{ix}	The Euclidean distance between P_{new} and P_x