LIST OF NOTATIONS

Symbols	Definition
n_target	The target number of minority class for oversampling
x_{new}	New generated samples
x_i	Instance in minority class
$x^{'}$	Randomly selected neighbor in SMOTE
δ	A random number between [0,1] for SMOTE calculation
x_i	Instance in minority class
x_i^k	The nearest neighbors of x_i for ADASYN calculation
λ	A random number between [0,1] for ADASYN calculation
G_i	The number of synthetic samples to generate for the i-th minority class sample
r_i	The difficulty level of ratio for the i-th minority class sample
G	The total number of synthetic samples to be genrated across all minority class samples
I	Set of instance I
P_i	Probability of instance i
τ_i	Pheromone value of instance i
τ_i^{new}	New pheromone value of instance i
ρ	Pheromone evaporation rate
$fitness_k$	Fitness value of ant k
$Gini(D)$	Gini index of node D
PD_i	Probability of D included in class Ci
m	number of labels
TP	The count of accurate positive predictions
TN	The count of accurate negative forecasts
FP	The count of incorrect positive forecasts
FN	The count of incorrect negative forecasts