

LIST OF NOTATIONS

Symbols	Definition
IR	Data imbalance measurement
N_{Maj}, N_{Min}	The class with the largest and smallest number of instances, respectively
p	Portion of big male Komodo
n	Population size of Komodo
q	Big male Komodo individuals
s	Small male Komodo individuals
r_1, r_2, r_l	Random values between 0 and 1
k_i, k_j	The i -th and j -th big male Komodo, respectively
$f(k_i), f(k_j)$	The quality of i -th and j -th big male Komodo, respectively
w_{ij}	The displacement weight of a big male Komodo, based on the interaction between Komodo individual i and individual j .
k'_i	New position of the i -th big male Komodo.
k_{il}, k_{jl}	High-quality big male Komodo and female Komodo
k'_{il}, k'_{jl}	Two offsprings generated by combination of big male Komodo and the female Komodo
d	Mlipir rate performed by the small male Komodo
a	The number of individuals to delete or generate
f_1, f_2, f_3	The best big Komodo from three consecutive generations of the Komodo population
$\delta f_1, \delta f_2$	The fitness difference between the current generation and the previous generation