

# - Results with DOB-SCV Partitioning -

## Content of each table:

- 1) Table I shows the results of Wilcoxon's test among the proposals of the paper. In this table, the classifier of each row is established as the control method for the statistical test and its ranks (R+), the ranks in favor of the method of the column (R-) and the  $p$ -value associated are shown.
- 2) Table II shows the results of applying the Wilcoxon test of each one of the proposals performed and NN.
- 3) Regarding the comparison between feature weighting techniques, Table III presents the multiple statistical comparison performed for each proposal (FW-KNNI, FW-CMC and FW-SVMI). The ranks obtained by the Friedman Aligned procedure (Rank column) and the  $p$ -value related to the significance of the differences found by this test ( $p_{FA}$  row) are shown. The  $p_{Finn}$  and  $p_{Holm}$  columns show the adjusted  $p$ -values computed by the Finner and Holm procedures.

TABLE I  
WILCOXON'S TEST BETWEEN THE PROPOSED METHODS.

	FW-KNNI			FW-CMC			FW-SVMI		
	R+	R-	$p$ -value	R+	R-	$p$ -value	R+	R-	$p$ -value
FW-KNNI	-	-	-	159	166	1.0000	191.5	133.5	0.4273
FW-CMC	166	159	0.9140	-	-	-	154	146	0.8970
FW-SVMI	133.5	191.5	1.0000	146	154	1.0000	-	-	-

TABLE II  
WILCOXON'S TEST BETWEEN THE PROPOSED METHODS AND NN.

Methods	R+	R-	$p$ -value
FW-KNNI vs NN	229	71	0.0229
FW-CMC vs NN	224.5	75.5	0.0327
FW-SVMI vs NN	228.5	71.5	0.0239

TABLE III  
STATISTICAL COMPARISON AMONG FEATURE WEIGHTING METHODS.

	FW-KNNI			FW-CMC			FW-SVMI		
	Rank	$p_{Finn}$	$p_{Holm}$	Rank	$p_{Finn}$	$p_{Holm}$	Rank	$p_{Finn}$	$p_{Holm}$
Imputation	42.90	-	-	43.78	-	-	43.74	-	-
CW	60.36	0.0884	0.119269	60.08	0.1117	0.143245	59.94	0.1139	0.131376
MI	84.30	0.0002	0.000214	83.64	0.0004	0.000401	83.90	0.0004	0.000355
ReliefF	65.24	0.0576	0.087737	65.26	0.0708	0.108184	64.82	0.0778	0.119002
IRelief	62.20	0.0787	0.119269	62.24	0.0943	0.143245	62.60	0.0866	0.131376
$p_{FA}$	0.0003			0.0003			0.0003		