

# - Results with 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	-	-	-	199.5	125.5	0.3130	196.5	103.5	0.2024
FW-CMC	125.5	199.5	1.0000	-	-	-	172.0	128.0	0.5203
FW-SVMI	103.5	196.5	1.0000	128.0	172.0	1.0000	-	-	-

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

Methods	R+	R-	$p$ -value
FW-KNNI vs NN	266.5	58.5	0.0040
FW-CMC vs NN	236.0	89.0	0.0483
FW-SVMI vs NN	203.0	97.0	0.1268

TABLE III  
STATISTICAL COMPARISON AMONG FEATURE WEIGHTING METHODS.

	FW-KNNI			FW-CMC			FW-SVMI		
	Rank	$p_{Holm}$	$p_{Finn}$	Rank	$p_{Holm}$	$p_{Finn}$	Rank	$p_{Holm}$	$p_{Finn}$
Imputation	40.56	-	-	42.1	-	-	42.22	-	-
CW	63.58	0.074012	0.048733	63.18	0.119002	0.077761	63.24	0.120701	0.078849
MI	88.32	0.000013	0.000013	88.48	0.000024	0.000024	88.16	0.000029	0.000029
ReliefF	61.94	0.074012	0.048942	60.72	0.138396	0.091183	60.8	0.139595	0.091963
IRelief	60.60	0.074012	0.0505	60.52	0.138396	0.091183	60.58	0.139595	0.091963
$p_{FA}$	0.000372320279			0.000373013229			0.000370758649		