kNNR	Best	Basic	Inv	Caruana	SWRSC	SWRSCX	WCH	SCH
automobile	26.96(4)	**21.95**(1)	21.95(2)	22.02(3)	27.26(5)	30.57(6)	21.27	10.26
fertility	100.08(4)	**95.87**(1)	96.15(2)	97.99(3)	106.72(6)	104.61(5)	93.40	59.15
flow	**84.49**(1)	87.19(3)	86.81(2)	90.28(4)	97.01(5)	102.39(6)	80.93	40.73
forest	102.02(3)	106.33(6)	105.25(5)	104.83(4)	**99.42**(1)	101.45(2)	101.94	90.47
servo	46.06(4)	48.89(6)	47.91(5)	**44.83**(1)	44.86(2)	45.83(3)	44.53	19.87
slump	92.55(3)	91.94(2)	**91.88**(1)	96.24(4)	104.05(6)	100.73(5)	86.73	47.26
traffic	37.30(4)	36.71(3)	**35.91**(1)	35.99(2)	37.60(5)	44.99(6)	31.87	19.84
wine_red	85.30(6)	**79.03**(1)	79.22(2)	81.97(5)	80.84(4)	79.36(3)	84.64	37.56
wine_white	84.91(6)	**78.33**(1)	78.48(2)	80.27(4)	80.04(3)	80.53(5)	83.47	36.56
Avg. Rank	(3.89)	(2.67)	(**2.44**)	(3.33)	(4.11)	(4.56)	-	-
Ridge	**Best**	**Basic**	**Inv**	**Caruana**	**SWRSC**	**SWRSCX**	**WCH**	**SCH**
automobile	20.05(5)	**17.20**(1)	17.34(3)	17.21(2)	18.57(4)	22.09(6)	17.03	9.06
fertility	102.36(4)	103.68(6)	103.65(5)	102.35(3)	**97.07**(1)	102.18(2)	102.36	96.91
flow	66.07(4)	66.27(6)	66.27(5)	65.66(3)	64.71(2)	**61.61**(1)	65.30	63.78
forest	99.01(3)	99.34(6)	99.34(5)	99.01(2)	**98.25**(1)	99.27(4)	98.98	97.74
servo	62.34(2)	62.50(3)	62.50(4)	**62.33**(1)	63.52(5)	64.34(6)	61.83	61.37
slump	86.55(3)	86.95(6)	86.95(5)	86.55(4)	85.61(2)	**76.88**(1)	86.18	83.92
traffic	39.51(2)	41.02(5)	40.93(4)	39.56(3)	**36.86**(1)	47.18(6)	39.48	38.07
wine_red	**64.89**(1)	65.43(5)	65.38(4)	64.91(2)	64.96(3)	65.67(6)	64.84	51.36
wine_white	72.66(4)	73.33(6)	73.27(5)	72.50(3)	**72.40**(1)	72.47(2)	72.02	60.33
Avg. Rank	(3.11)	(4.89)	(4.44)	(2.56)	(**2.22**)	(3.78)	-	-
Lasso	**Best**	**Basic**	**Inv**	**Caruana**	**SWRSC**	**SWRSCX**	**WCH**	**SCH**
automobile	18.45(5)	18.45(3)	18.45(2)	18.45(4)	**18.19**(1)	20.63(6)	18.45	18.45
fertility	95.55(4)	**94.17**(1)	94.17(2)	94.83(3)	96.66(5)	102.64(6)	92.74	90.36
flow	66.82(3)	66.83(6)	66.83(5)	66.83(4)	65.61(2)	**61.68**(1)	66.82	66.80
forest	100.14(6)	100.13(5)	100.13(4)	100.12(3)	**98.34**(1)	99.61(2)	100.09	100.08
servo	**63.17**(1)	63.38(2)	63.38(3)	63.43(4)	63.77(5)	64.69(6)	62.67	62.15
slump	87.59(3)	87.61(6)	87.61(5)	87.61(4)	86.06(2)	**77.06**(1)	87.59	87.55
traffic	38.64(2)	39.03(5)	39.02(4)	38.96(3)	**37.39**(1)	52.42(6)	38.60	38.16
wine_red	69.24(3)	70.68(6)	70.67(5)	70.06(4)	68.94(2)	**68.34**(1)	69.24	66.52
wine_white	78.40(5)	78.39(4)	78.39(3)	78.36(2)	**78.31**(1)	78.87(6)	78.33	77.45
Avg. Rank	(3.56)	(4.22)	(3.67)	(3.44)	(**2.22**)	(3.89)	-	-
SVR	**Best**	**Basic**	**Inv**	**Caruana**	**SWRSC**	**SWRSCX**	**WCH**	**SCH**
automobile	**20.60**(1)	44.64(6)	24.07(4)	20.98(2)	21.89(3)	27.68(5)	19.23	6.98
fertility	98.43(5)	**93.77**(1)	94.18(2)	97.03(3)	97.97(4)	100.75(6)	91.64	54.86
flow	70.32(2)	78.59(6)	71.31(3)	**66.97**(1)	72.94(4)	76.29(5)	59.75	27.47
forest	**98.14**(1)	104.44(6)	99.62(2)	99.67(3)	100.46(4)	102.05(5)	97.64	84.64
servo	21.53(4)	59.23(6)	39.39(5)	**19.25**(1)	19.53(2)	20.53(3)	15.31	11.08
slump	80.17(2)	165.58(6)	85.19(3)	**68.72**(1)	134.35(5)	123.76(4)	71.82	20.48
traffic	41.89(4)	37.77(2)	**35.93**(1)	38.17(3)	43.97(5)	45.43(6)	29.04	8.47
wine_red	66.87(5)	78.14(6)	65.82(4)	60.32(3)	**58.78**(1)	59.35(2)	64.46	9.22
wine_white	78.04(4)	192.42(6)	122.08(5)	61.97(3)	**56.87**(1)	56.91(2)	72.55	11.26
Avg. Rank	(3.11)	(5.00)	(3.22)	(**2.22**)	(3.22)	(4.22)	-	-

Table 10: The 3-fold cross validation relative mean squared error and Friedman ranks for all datasets when the best hyperparameter configuration trial (Best), simple average (Basic), the inverse of the error (Inv), Caruana method (Caruana) and non-hyperparametric stepwise regression adaptation with stop criterion adding features (SWRSCX) or not (SWRSC), all taking into account several baseline systems (kNNR, Ridge, Lasso and SVR) and the HB sampling strategy. The scores for the cheating approaches WCH and SCH are also shown, but they were not included in the computation of the Friedman ranks.