kNNR	Best	LR	LRX	SWR	SWRX	SWRSC	SWRSCX
automobile	26.96(4)	**24.02**(1)	36.73(7)	25.76(2)	26.00(3)	27.26(5)	30.57(6)
fertility	**100.08**(1)	100.23(2)	109.34(6)	110.46(7)	108.76(5)	106.72(4)	104.61(3)
flow	**84.49**(1)	98.01(5)	107.90(7)	89.06(3)	88.33(2)	97.01(4)	102.39(6)
forest	102.02(6)	**98.68**(1)	102.05(7)	99.82(3)	99.96(4)	99.42(2)	101.45(5)
servo	46.06(4)	**44.33**(1)	46.39(5)	46.48(7)	46.42(6)	44.86(2)	45.83(3)
slump	**92.55**(1)	105.58(5)	110.62(7)	94.28(2)	105.71(6)	104.05(4)	100.73(3)
traffic	37.30(4)	36.22(3)	46.04(7)	**35.29**(1)	35.47(2)	37.60(5)	44.99(6)
wine_red	85.30(7)	79.89(3)	**77.78**(1)	84.52(6)	84.51(5)	80.84(4)	79.36(2)
wine_white	84.91(7)	**77.94**(1)	77.96(2)	84.67(5)	84.74(6)	80.04(3)	80.53(4)
Avg. Rank	(3.89)	(**2.44**)	(5.44)	(4.00)	(4.33)	(3.67)	(4.22)
Ridge	Best	LR	LRX	SWR	SWRX	SWRSC	SWRSCX
automobile	20.05(4)	3.16E+07(6)	8.84E+07(7)	19.57(3)	19.55(2)	**18.57**(1)	22.09(5)
fertility	102.36(3)	2.05E+03(7)	1.19E+03(6)	102.96(4)	118.86(5)	**97.07**(1)	102.18(2)
flow	66.07(5)	1.30E+07(6)	1.52E+08(7)	65.25(4)	63.56(2)	64.71(3)	**61.61**(1)
forest	99.01(3)	683.72(6)	1.02E+03(7)	**97.88**(1)	99.58(5)	98.25(2)	99.27(4)
servo	**62.34**(1)	201.26(6)	206.49(7)	62.68(2)	62.83(3)	63.52(4)	64.34(5)
slump	86.55(5)	2.97E+08(6)	4.80E+08(7)	85.70(4)	85.41(2)	85.61(3)	**76.88**(1)
traffic	39.51(2)	3.08E+07(6)	3.51E+09(7)	39.53(3)	39.94(4)	**36.86**(1)	47.18(5)
wine_red	**64.89**(1)	1.79E+07(6)	2.05E+07(7)	64.91(2)	65.04(4)	64.96(3)	65.67(5)
wine_white	72.66(5)	6.95E+03(7)	763.03(6)	72.43(3)	72.42(2)	**72.40**(1)	72.47(4)
Avg. Rank	(3.22)	(6.22)	(6.78)	(2.89)	(3.22)	(**2.11**)	(3.56)
Lasso	Best	LR	LRX	SWR	SWRX	SWRSC	SWRSCX
automobile	18.45(4)	31.43(6)	58.25(7)	18.31(3)	18.31(2)	**18.19**(1)	20.63(5)
fertility	**95.55**(1)	206.10(6)	270.66(7)	96.09(2)	96.29(3)	96.66(4)	102.64(5)
flow	66.82(5)	199.26(6)	200.90(7)	66.50(4)	64.56(2)	65.61(3)	**61.68**(1)
forest	100.14(5)	105.79(6)	106.76(7)	98.79(2)	99.57(3)	**98.34**(1)	99.61(4)
servo	63.17(3)	51.57(2)	**51.35**(1)	63.23(4)	63.88(6)	63.77(5)	64.69(7)
slump	87.59(5)	96.34(7)	88.76(6)	86.74(4)	86.12(3)	86.06(2)	**77.06**(1)
traffic	38.64(2)	1.09E+07(6)	1.12E+09(7)	39.13(4)	39.03(3)	**37.39**(1)	52.42(5)
wine_red	69.24(4)	105.45(6)	107.94(7)	69.23(3)	69.34(5)	68.94(2)	**68.34**(1)
wine_white	78.40(5)	78.21(2)	78.73(6)	78.33(4)	**78.20**(1)	78.31(3)	78.87(7)
Avg. Rank	(3.78)	(5.22)	(6.11)	(3.33)	(3.11)	(**2.44**)	(4.00)
SVR	Best	LR	LRX	SWR	SWRX	SWRSC	SWRSCX
automobile	**20.60**(1)	273375.72(7)	95129.58(6)	21.48(2)	21.59(3)	21.89(4)	27.68(5)
fertility	98.43(4)	181.23(6)	227.20(7)	**96.19**(1)	96.83(2)	97.97(3)	100.75(5)
flow	70.32(3)	3.69E+06(6)	9.66E+06(7)	65.44(2)	**63.31**(1)	72.94(4)	76.29(5)
forest	**98.14**(1)	122.45(6)	128.73(7)	101.39(3)	101.70(4)	100.46(2)	102.05(5)
servo	21.53(5)	74.73(6)	119.47(7)	20.16(2)	20.42(3)	**19.53**(1)	20.53(4)
slump	80.17(3)	8.55E+14(7)	2.25E+13(6)	**79.01**(1)	79.30(2)	134.35(5)	123.76(4)
traffic	**41.89**(1)	425.97(7)	323.31(6)	48.86(4)	51.73(5)	43.97(2)	45.43(3)
wine_red	66.87(5)	58.91(2)	59.78(4)	68.81(6)	69.00(7)	**58.78**(1)	59.35(3)
wine_white	78.04(5)	289.12(6)	337.95(7)	70.84(4)	70.80(3)	**56.87**(1)	56.91(2)
Avg. Rank	(3.11)	(5.89)	(6.33)	(2.78)	(3.33)	(**2.56**)	(4.00)

Table 5: The 3-fold cross validation relative mean squared error and Friedman ranks for all datasets when the best hyperparameter configuration trial (Best), linear regression via least squared with the option of adding features (LRX) or not (LR), non-hyperparametric stepwise regression adding features (SWRX) or not (SWR) 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.