

HPO	MLS	OLS	GEM	FSR(*)	PCR(AICc)	PLS(GMDL)	BST(AICc)	RBST(AIC)	BST(ICM)	RBST(ICM)
Ridge	automobile	2.41e+7(9)	18.05(4)	18.86(6)	417.34(8)	18.43(5)	18.86(6)	18.00(2)	18.01(3)	<b>17.55(1)</b>
	fertility	1.76e+13(9)	109.21(8)	102.90(3)	106.73(7)	102.98(5)	102.90(3)	102.90(3)	103.08(6)	<b>102.81(1)</b>
	flow	5.72e+4(9)	66.39(8)	64.53(3)	65.32(7)	65.13(6)	64.53(3)	64.53(3)	<b>63.25(1)</b>	64.65(5)
	forest	1.48e+10(9)	112.29(8)	100.90(3)	101.76(6)	<b>100.40(1)</b>	100.90(3)	100.90(3)	102.03(7)	100.93(5)
	servo	691.02(9)	63.81(8)	60.26(4)	60.53(7)	60.28(6)	60.26(4)	60.26(4)	<b>59.78(1)</b>	60.21(2)
	slump	3.36e+6(9)	90.53(8)	85.49(3)	87.19(6)	85.94(5)	85.49(3)	85.49(3)	87.32(7)	<b>85.38(1)</b>
	traffic	5.7e+13(9)	46.93(8)	45.32(6)	43.95(2)	44.95(3)	45.32(6)	45.32(6)	<b>43.46(1)</b>	45.05(4)
	wine_red	4.29e+6(9)	64.97(6)	64.94(3)	65.46(7)	65.64(8)	64.94(3)	64.94(3)	<b>64.91(1)</b>	64.95(5)
SVR	wine_white	8.23e+9(9)	73.08(5)	<b>73.07(2)</b>	75.37(8)	73.94(7)	<b>73.07(2)</b>	<b>73.07(2)</b>	73.07(4)	73.08(6)
	Avg. Rank	(9.00)	(7.00)	(3.72)	(6.44)	(5.11)	(3.72)	<b>(3.22)</b>	(3.44)	(3.33)
	automobile	3.16e+14(9)	108.12(7)	74.01(3)	451.56(8)	<b>73.87(1)</b>	74.01(3)	74.01(3)	74.27(6)	74.02(5)
	fertility	1.32e+3(9)	<b>101.87(1)</b>	111.19(6)	117.74(8)	108.11(2)	111.19(6)	111.19(6)	110.72(4)	108.24(3)
	flow	9.77e+12(9)	91.11(5)	90.51(3)	296.80(8)	98.99(7)	90.29(2)	90.51(3)	<b>85.76(1)</b>	91.22(6)
	forest	2.78e+12(9)	<b>97.53(1)</b>	100.30(3)	103.89(8)	100.67(7)	100.30(3)	100.30(3)	100.45(5)	100.47(6)
	servo	463.15(9)	20.90(2)	22.51(6)	32.08(8)	21.37(3)	22.51(6)	21.66(4)	21.66(5)	<b>20.63(1)</b>
	slump	6.22e+14(9)	97.19(7)	92.98(4)	274.30(8)	92.39(2)	92.99(6)	92.98(4)	<b>90.41(1)</b>	92.90(3)
RF	traffic	1.22e+4(9)	61.88(3)	63.44(5)	88.31(8)	70.81(7)	63.44(5)	63.04(4)	60.98(2)	<b>59.10(1)</b>
	wine_red	71.65(4)	70.48(2)	76.72(7)	84.20(9)	75.57(5)	76.72(7)	76.72(7)	71.10(3)	<b>69.80(1)</b>
	wine_white	73.50(8)	68.62(2)	72.75(6)	79.47(9)	72.53(4)	72.75(6)	72.75(6)	70.26(3)	<b>68.23(1)</b>
	Avg. Rank	(8.33)	(3.33)	(5.00)	(8.22)	(4.22)	(5.00)	(4.56)	(3.33)	<b>(3.00)</b>
	automobile	60.61(8)	27.96(7)	<b>17.77(2)</b>	411.55(9)	18.56(6)	<b>17.77(2)</b>	<b>17.77(2)</b>	18.12(5)	17.90(4)
	fertility	183.69(9)	<b>90.75(1)</b>	97.23(6)	107.00(8)	93.11(2)	97.23(6)	97.23(6)	94.80(4)	94.74(3)
	flow	81.14(8)	<b>61.07(1)</b>	61.60(3)	874.77(9)	73.98(7)	61.60(3)	61.60(3)	62.06(5)	62.31(6)
	forest	161.66(9)	119.11(8)	108.11(6)	<b>103.94(1)</b>	106.27(3)	108.11(6)	108.11(6)	105.26(2)	107.96(4)
RF	servo	75.32(9)	16.82(5)	16.42(2)	32.11(8)	19.75(7)	16.60(4)	16.42(2)	<b>16.24(1)</b>	17.41(6)
	slump	121.25(8)	76.25(2)	76.73(4)	369.46(9)	80.57(6)	76.73(4)	76.73(4)	83.93(7)	<b>75.15(1)</b>
	traffic	71.27(9)	<b>46.02(1)</b>	54.33(6)	70.89(8)	50.89(4)	54.33(6)	54.33(6)	50.65(3)	50.30(2)
	wine_red	63.87(7)	60.24(2)	60.35(5)	71.85(9)	68.54(8)	60.35(5)	60.35(5)	60.25(3)	<b>60.06(1)</b>
	wine_white	66.30(2)	67.58(7)	66.69(5)	77.91(9)	76.03(8)	66.69(5)	66.69(5)	<b>65.99(1)</b>	66.58(3)
	Avg. Rank	(7.67)	(3.78)	(4.39)	(7.78)	(5.67)	(4.56)	(4.39)	(3.44)	<b>(3.33)</b>
	Mean Rank	(8.33)	(4.70)	(4.37)	(7.48)	(5.00)	(4.43)	(4.06)	(3.41)	<b>(3.22)</b>

Table 4: The 3-fold cross validation relative mean squared error and Friedman ranks for all the datasets when OLS and GEM and the best stop criteria among AIC, AICc, BIC, HQIC, GMDL for FSR, PCR, PLS, BST and RBST and the novel stop criterion ICM for BST and RBST, taking into account some baseline systems (Ridge, SVR and RF) and the PSO sampling strategy.