

HPO	MLS	OLS	GEM	FSR(*)	PCR(AICc)	PLS(AICc)	BST(AICc)	RBST(AICc)	BST(ICM)	RBST(ICM)
Ridge	abalone	9.55e+7(9)	47.29(2)	47.39(5)	48.09(8)	<b>46.85(1)</b>	47.39(5)	47.39(5)	47.39(7)	47.30(3)
	airfoil_self_noise	8.12e+5(9)	49.42(2)	49.42(4)	3.29e+4(8)	51.16(7)	49.42(4)	49.42(4)	<b>49.39(1)</b>	49.43(6)
	auto_mpg	997.06(9)	18.44(5)	18.42(3)	941.59(8)	19.12(7)	18.42(3)	18.42(3)	<b>18.42(1)</b>	18.48(6)
	automobile	95.52(8)	17.94(2)	19.91(6)	404.62(9)	18.23(3)	19.91(6)	19.10(5)	18.72(4)	<b>17.60(1)</b>
	concrete.data	39.50(5)	39.50(5)	39.50(5)	39.50(5)	39.50(5)	<b>39.14(1)</b>	39.50(5)	39.50(5)	39.50(5)
	crime	2.59e+5(9)	35.28(7)	<b>34.71(2)</b>	35.11(6)	35.61(8)	<b>34.71(2)</b>	<b>34.71(2)</b>	34.82(4)	35.09(5)
	fertility	2.21e+13(9)	109.04(8)	106.65(6)	106.25(4)	106.17(3)	106.65(6)	106.65(6)	106.10(2)	<b>104.79(1)</b>
	flow	1.79e+8(9)	66.03(6)	64.26(3)	67.89(7)	68.85(8)	64.26(3)	64.26(3)	64.96(5)	<b>63.94(1)</b>
	forest	3.75e+10(9)	109.82(8)	102.13(4)	102.21(6)	<b>101.42(1)</b>	102.13(4)	102.13(4)	102.31(7)	101.76(2)
	qsar	918.15(9)	43.15(7)	43.08(4)	43.22(8)	<b>43.07(1)</b>	43.08(4)	43.08(4)	43.08(6)	43.08(2)
	servo	3.25e+9(9)	63.55(8)	61.51(5)	61.38(3)	<b>60.05(1)</b>	61.51(5)	61.51(5)	60.28(2)	61.63(7)
	slump	7.37e+8(9)	90.11(6)	86.94(3)	94.97(8)	90.65(7)	86.94(3)	86.94(3)	89.46(5)	<b>86.65(1)</b>
	traffic	7.81e+12(9)	47.18(7)	45.01(5)	47.22(8)	43.97(2)	45.01(5)	45.01(5)	<b>43.26(1)</b>	44.98(3)
	wine_red	3.20e+4(9)	<b>64.95(1)</b>	65.01(4)	68.89(8)	65.93(7)	65.01(4)	65.01(4)	64.98(2)	65.03(6)
	wine_white	1.85e+5(9)	<b>73.08(1)</b>	73.10(4)	74.78(8)	74.76(7)	73.10(4)	73.10(4)	73.11(6)	73.10(2)
Avg. Rank		(8.70)	(5.03)	(4.27)	(6.97)	(4.57)	(3.97)	(4.17)	(3.90)	<b>(3.43)</b>
SVR	abalone	65.03(9)	44.11(7)	<b>42.96(2)</b>	48.31(8)	43.61(6)	<b>42.96(2)</b>	<b>42.96(2)</b>	42.98(4)	43.02(5)
	airfoil_self_noise	3.61e+15(9)	3.07e+6(8)	<b>77.57(2)</b>	3.26e+4(7)	101.76(6)	<b>77.57(2)</b>	<b>77.57(2)</b>	90.99(5)	81.49(4)
	auto_mpg	9.61e+10(9)	9.11e+4(8)	<b>19.22(2)</b>	1.04e+3(7)	25.65(6)	<b>19.22(2)</b>	<b>19.22(2)</b>	19.77(5)	19.54(4)
	automobile	6.89e+12(9)	39.11(7)	19.48(3)	420.25(8)	19.99(5)	19.48(3)	19.48(3)	<b>19.39(1)</b>	20.74(6)
	concrete.data	42.45(5)	42.45(5)	42.45(5)	42.45(5)	42.45(5)	<b>40.02(1)</b>	42.45(5)	42.45(5)	42.45(5)
	crime	35.78(4)	35.10(3)	36.53(7)	201.62(9)	35.02(2)	36.53(7)	36.53(7)	36.43(5)	<b>34.93(1)</b>
	fertility	715.72(9)	106.37(3)	108.31(5)	122.70(8)	121.15(7)	108.31(5)	108.31(5)	103.77(2)	<b>102.99(1)</b>
	flow	3.71e+9(9)	74.95(6)	69.56(3)	918.02(8)	68.17(2)	<b>65.89(1)</b>	69.56(3)	72.36(5)	83.51(7)
	forest	427.50(9)	<b>100.18(1)</b>	101.88(4)	105.63(8)	100.88(2)	101.88(4)	101.88(4)	102.03(6)	102.14(7)
	qsar	398.21(9)	37.34(2)	38.98(5)	44.06(8)	38.01(3)	38.98(5)	39.03(7)	38.61(4)	<b>36.82(1)</b>
	servo	5.91e+15(9)	16.98(7)	<b>15.07(1)</b>	20.48(8)	16.14(5)	<b>15.07(1)</b>	16.75(6)	15.10(3)	15.10(4)
	slump	3.52e+10(9)	99.10(7)	83.74(4)	571.01(8)	83.61(3)	79.90(2)	83.74(4)	<b>78.87(1)</b>	85.01(6)
	traffic	5.17e+4(9)	42.32(2)	57.27(7)	538.36(8)	47.94(4)	55.75(6)	47.10(3)	50.72(5)	<b>41.02(1)</b>
	wine_red	65.93(8)	60.32(4)	65.68(6)	68.98(9)	58.35(3)	61.60(5)	65.68(6)	<b>57.45(1)</b>	57.67(2)
	wine_white	59.41(5)	62.79(7)	73.34(9)	71.67(8)	58.30(3)	58.81(4)	61.10(6)	<b>58.04(1)</b>	58.16(2)
Avg. Rank		(8.10)	(5.17)	(4.53)	(7.83)	(4.17)	<b>(3.40)</b>	(4.47)	(3.57)	(3.77)
RFR	abalone	45.08(3)	44.78(2)	45.23(6)	65.28(9)	45.88(8)	45.23(6)	45.23(6)	45.20(4)	<b>44.77(1)</b>
	airfoil_self_noise	<b>16.10(1)</b>	19.70(8)	18.53(6)	2.54e+3(9)	16.59(2)	18.53(6)	18.53(6)	18.34(4)	17.79(3)
	auto_mpg	17.24(8)	14.03(2)	14.76(6)	904.86(9)	<b>13.88(1)</b>	14.76(6)	14.76(6)	14.74(4)	14.10(3)
	automobile	33.66(8)	19.07(6)	12.49(3)	407.79(9)	25.45(7)	12.49(3)	12.49(3)	<b>12.27(1)</b>	14.10(5)
	concrete.data	<b>11.99(4)</b>	24.70(9)	<b>11.99(4)</b>	<b>11.99(4)</b>	<b>11.99(4)</b>	12.03(8)	<b>11.99(4)</b>	<b>11.99(4)</b>	<b>11.99(4)</b>
	crime	36.98(5)	<b>35.42(1)</b>	36.99(7)	37.24(9)	36.05(3)	36.99(7)	36.99(7)	36.41(4)	35.70(2)
	fertility	142.69(9)	<b>97.08(1)</b>	102.29(2)	111.04(7)	139.92(8)	107.67(6)	102.29(2)	102.42(4)	105.65(5)
	flow	133.57(8)	<b>62.30(1)</b>	67.06(4)	882.23(9)	73.19(7)	67.06(4)	67.06(4)	67.35(6)	64.85(2)
	forest	266.18(9)	126.63(8)	123.56(6)	<b>104.31(1)</b>	107.25(2)	123.56(6)	123.56(6)	108.86(3)	110.63(4)
	qsar	40.48(8)	38.42(2)	38.67(5)	46.24(9)	38.95(7)	38.67(5)	38.67(5)	38.48(3)	<b>38.27(1)</b>
	servo	28.74(9)	<b>17.84(1)</b>	18.08(3)	22.66(7)	28.00(8)	18.08(3)	18.08(3)	18.29(5)	19.35(6)
	slump	109.28(8)	<b>68.30(1)</b>	71.35(3)	531.38(9)	88.26(7)	71.35(3)	71.35(3)	74.45(6)	72.73(5)
	traffic	100.75(9)	43.77(2)	45.28(4)	72.05(8)	50.34(7)	45.28(4)	45.28(4)	<b>42.76(1)</b>	48.05(6)
	wine_red	59.71(8)	57.32(2)	59.09(6)	70.56(9)	57.64(3)	59.09(6)	59.09(6)	58.67(4)	<b>57.25(1)</b>
	wine_white	<b>60.12(1)</b>	61.09(7)	60.67(4)	69.18(9)	62.48(8)	60.67(4)	60.67(4)	60.53(2)	60.69(6)
Avg. Rank		(6.53)	<b>(3.53)</b>	(4.63)	(7.80)	(5.47)	(5.13)	(4.63)	(3.67)	(3.60)
Mean Rank		(7.78)	(4.58)	(4.48)	(7.53)	(4.73)	(4.17)	(4.42)	(3.71)	<b>(3.60)</b>

Table 2: 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 RFR) and the RS sampling strategy.