| MLS | Dataset | Best | BEM | IEW | GEM | Caruana | RBST(ICM) |
|---|---|---|---|---|---|---|---|
| | abalone | 47.51(6) | **47.46**(1) | 47.46(2) | 47.50(5) | 47.48(3) | 47.49(4) |
| | airfoil_self_noise | **48.91**(1) | 50.50(6) | 50.08(5) | 48.91(3) | 48.91(2) | 49.01(4) |
| | auto_mpg | 18.43(3) | **18.43**(1) | 18.43(2) | 18.50(4) | 18.50(5) | 18.51(6) |
| | automobile | 18.41(6) | 17.52(2) | 17.57(4) | 17.71(5) | **16.85**(1) | 17.56(3) |
| | concrete_data | 39.17(6) | **39.12**(1) | 39.12(2) | 39.16(4) | 39.16(5) | 39.15(3) |
| | crime | **34.73**(1) | 34.79(4) | 34.79(3) | 34.79(2) | 34.80(6) | 34.79(5) |
| | fertility | 109.02(2) | 109.15(6) | 109.14(5) | 109.12(4) | 109.12(3) | **102.73**(1) |
| Ridge | flow | 65.60(2) | 66.37(6) | 66.36(5) | 65.60(4) | 65.60(2) | **63.85**(1) |
| | forest | 112.02(2) | 112.68(6) | 112.68(5) | 112.17(4) | 112.11(3) | **100.73**(1) |
| | qsar | 43.13(4) | 43.14(6) | 43.14(5) | 43.13(3) | 43.13(2) | **43.05**(1) |
| | servo | 63.80(4) | 63.71(3) | 63.71(2) | 63.80(5) | 63.80(6) | **60.20**(1) |
| | slump | 90.91(2) | 91.04(6) | 91.04(5) | 90.91(4) | 90.91(2) | **85.69**(1) |
| | traffic | 46.80(3) | 47.50(6) | 47.46(5) | 46.80(2) | 46.80(3) | **44.65**(1) |
| | wine_red | 64.95(2) | 65.03(6) | 65.03(5) | 64.96(4) | 64.96(3) | **64.95**(1) |
| | wine_white | **72.96**(1) | 73.11(6) | 73.11(5) | 72.96(2) | 72.96(3) | 72.97(4) |
| Avg. Rank | | (3.10) | (4.40) | (4.00) | (3.67) | (3.37) | (**2.47**) |
| | abalone | 43.99(4) | 45.94(6) | 45.24(5) | 43.91(2) | 43.91(3) | **42.69**(1) |
| | airfoil_self_noise | 78.48(4) | 79.70(6) | 79.18(5) | 72.69(2) | 72.76(3) | **71.14**(1) |
| | auto_mpg | **37.09**(1) | 93.06(6) | 87.61(5) | 37.11(3) | 37.11(2) | 37.61(4) |
| | automobile | 115.89(5) | 115.88(3) | 115.88(4) | 110.99(2) | 115.89(5) | **100.28**(1) |
| | concrete_data | 54.17(2) | 81.29(6) | 78.99(5) | 59.56(4) | 54.17(2) | **53.93**(1) |
| | crime | 42.12(4) | 195.46(6) | 46.75(5) | 41.45(3) | 41.43(2) | **41.22**(1) |
| | fertility | 99.56(3) | **99.26**(1) | 99.40(2) | 100.62(4) | 100.62(5) | 113.30(6) |
| SVR | flow | 77.67(3) | 91.11(6) | 90.45(5) | 76.52(2) | **76.48**(1) | 78.29(4) |
| | forest | 97.40(4) | 97.19(3) | 97.17(2) | **95.50**(1) | 97.51(5) | 100.29(6) |
| | qsar | 39.88(4) | 41.73(6) | 41.08(5) | 36.65(3) | 36.62(2) | **36.59**(1) |
| | servo | **17.29**(1) | 43.90(6) | 35.21(5) | 18.14(2) | 18.14(3) | 18.39(4) |
| | slump | 81.07(4) | 90.44(6) | 89.12(5) | 75.60(2) | 75.61(3) | **74.01**(1) |
| | traffic | 37.64(2) | 49.05(6) | 44.64(5) | **37.64**(1) | 37.68(3) | 39.60(4) |
| | wine_red | 65.75(6) | 64.51(5) | 64.25(4) | 60.06(3) | 60.06(2) | **56.50**(1) |
| | wine_white | 73.41(6) | 70.84(5) | 69.70(4) | 60.59(3) | 60.59(2) | **55.92**(1) |
| Avg. Rank | | (3.60) | (5.13) | (4.40) | (**2.47**) | (2.93) | (**2.47**) |
| | abalone | 44.94(4) | 47.70(6) | 47.02(5) | **44.30**(1) | 44.32(2) | 44.40(3) |
| | airfoil_self_noise | 24.91(2) | 40.46(6) | 34.51(5) | 25.30(3) | 25.63(4) | **22.91**(1) |
| | auto_mpg | 14.57(5) | 14.77(6) | 14.39(4) | 14.02(2) | **13.99**(1) | 14.36(3) |
| | automobile | 15.38(2) | 17.40(6) | 16.28(4) | 17.33(5) | 15.43(3) | **14.99**(1) |
| | concrete_data | 24.78(3) | 28.49(6) | 26.13(4) | 26.26(5) | 21.92(2) | **16.54**(1) |
| | crime | 36.17(6) | 35.70(5) | 35.66(4) | 35.20(2) | 35.20(3) | **35.10**(1) |
| | fertility | 96.37(4) | 96.07(2) | 96.32(3) | 96.63(6) | 96.63(5) | **94.58**(1) |
| RFR | flow | 63.85(6) | 61.35(4) | 61.45(5) | **59.02**(1) | 59.69(2) | 61.24(3) |
| | forest | **103.29**(1) | 104.33(3) | 104.23(2) | 106.05(5) | 105.87(4) | 106.29(6) |
| | qsar | 39.46(4) | 42.17(6) | 40.68(5) | 37.68(3) | 37.68(2) | **37.51**(1) |
| | servo | **13.95**(1) | 21.35(6) | 18.18(5) | 14.52(3) | 14.42(2) | 14.55(4) |
| | slump | 74.16(6) | **70.24**(1) | 70.39(2) | 72.16(3) | 72.78(5) | 72.21(4) |
| | traffic | 49.04(6) | 43.99(4) | 43.88(3) | **43.67**(1) | 43.70(2) | 45.17(5) |
| | wine_red | 57.54(4) | 59.80(6) | 59.14(5) | **55.97**(1) | 55.98(2) | 56.56(3) |
| | wine_white | 60.54(4) | 61.74(6) | 61.23(5) | 59.25(3) | 59.21(2) | **59.05**(1) |
| Avg. Rank | | (3.87) | (4.87) | (4.07) | (2.93) | (2.73) | (**2.53**) |
| Mean Rank | | (3.52) | (4.80) | (4.16) | (3.02) | (3.01) | (**2.49**) |

Table 3: The 3-fold cross validation relative mean squared error and Friedman ranks for all the datasets when Best, BEM, IEW, GEM, Caruana, BST(ICM) and RBST(ICM) , taking into account some baseline systems (Ridge, SVR and RFR) and the BO sampling strategy.