

Table 1: The Scott-Knott ranks ( $r$ ) on the MRE, and the median and interquartile range of MRE, denoted as Med (IQR), of DaL under different local models and their global counterparts. The green cells denote the one with the best rank over all the approaches.

System	Size	Dal		DNN		Dal <sub>RF</sub>		RF		Dal <sub>DT</sub>		DT		Dal <sub>LR</sub>		LR		Dal <sub>SVR</sub>		SVR		Dal <sub>KRR</sub>		KRR		Dal <sub>kNN</sub>		kNN	
		r	Med(IQR)	r	Med(IQR)	r	Med(IQR)	r	Med(IQR)	r	Med(IQR)	r	Med(IQR)	r	Med(IQR)	r	Med(IQR)	r	Med(IQR)	r	Med(IQR)	r	Med(IQR)	r	Med(IQR)	r	Med(IQR)	r	Med(IQR)
APACHE	Size 1	1	21.02(6.64)	1	21.39(5.01)	3	20.19(6.34)	2	21.20(7.72)	2	21.61(6.69)	2	20.85(12.99)	1	19.71(6.80)	5	27.72(4.98)	4	23.30(4.08)	4	22.67(3.66)	6	36.95(3.77)	7	49.97(14.23)	2	21.71(4.97)	2	22.09(3.33)
	Size 2	2	9.82(5.39)	1	9.79(4.56)	2	12.06(5.81)	2	12.02(6.58)	2	10.41(5.04)	1	10.06(3.05)	3	11.03(7.55)	5	17.61(2.41)	6	17.59(3.76)	7	20.31(3.18)	8	34.87(4.66)	9	34.72(3.83)	4	13.73(4.61)	6	18.64(2.56)
	Size 3	1	7.17(2.67)	3	7.93(3.15)	2	7.08(1.91)	2	7.65(1.46)	4	9.10(1.31)	4	9.03(1.13)	1	7.42(2.14)	7	16.16(1.41)	6	15.92(2.45)	9	18.50(1.54)	10	25.88(4.60)	11	33.54(2.80)	5	11.60(1.49)	8	17.30(1.39)
	Size 4	2	6.59(1.77)	2	6.85(1.60)	3	6.94(1.32)	2	6.63(1.19)	5	7.97(1.35)	4	7.81(1.35)	1	6.39(1.16)	8	16.12(0.78)	7	13.89(2.35)	9	18.57(1.58)	10	22.79(1.77)	11	32.31(1.38)	6	11.00(1.44)	8	15.64(1.46)
	Size 5	2	5.96(2.07)	4	6.66(1.61)	3	6.43(1.11)	5	7.63(1.00)	5	7.71(1.03)	1	5.75(0.55)	9	16.12(1.37)	7	12.63(1.76)	10	17.82(1.78)	11	21.79(2.07)	12	32.11(1.43)	6	10.45(1.28)	8	14.75(1.41)		
BDBC	Size 1	2	41.77(32.54)	2	43.66(42.88)	6	25.37(8.93)	6	25.37(8.93)	6	25.37(8.93)	6	25.37(8.93)	3	65.09(37.63)	8	69.81(213.51)	3	65.38(22.26)	4	154.71(52.45)	2	64.22(15.94)	7	231.74(136.07)	3	68.32(34.34)	5	201.51(70.38)
	Size 2	1	17.22(15.67)	1	18.17(8.11)	3	30.69(29.47)	4	73.41(118.30)	1	16.81(8.59)	2	19.61(7.19)	7	49.04(47.11)	6	545.48(149.70)	5	70.56(64.18)	5	117.87(49.95)	4	43.14(41.44)	6	280.15(96.55)	5	78.59(42.86)	6	245.08(180.15)
	Size 3	3	5.74(6.84)	5	12.47(4.08)	4	15.30(6.90)	4	18.64(19.42)	3	6.72(5.82)	1	7.44(3.70)	6	29.00(78.81)	9	465.51(91.79)	8	65.69(155.89)	7	97.22(62.60)	6	26.43(70.74)	9	283.32(39.54)	8	58.12(21.53)	9	279.13(144.62)
	Size 4	1	3.68(2.78)	3	9.06(9.76)	3	9.40(3.63)	4	11.32(6.77)	1	4.15(2.78)	2	5.74(3.97)	5	24.55(4.18)	9	441.04(85.57)	6	51.04(29.64)	7	93.39(41.17)	5	23.34(4.86)	8	295.23(47.23)	6	60.43(18.64)	7	238.59(144.43)
	Size 5	1	2.15(1.52)	3	7.08(8.03)	2	6.87(3.29)	4	6.64(3.35)	1	3.24(3.09)	4	22.88(8.78)	9	456.02(78.01)	6	46.18(19.08)	7	105.14(56.61)	5	22.11(3.66)	9	316.72(43.94)	6	56.42(16.71)	8	178.91(128.49)		
BDB-J	Size 1	2	3.14(2.90)	2	2.98(3.34)	3	8.36(10.48)	1	2.98(0.81)	9	5.31(2.96)	8	43.23(6.15)	6	22.77(17.72)	4	12.93(3.37)	3	6.42(9.07)	7	34.58(4.94)	5	20.31(7.60)	5	24.03(7.11)				
	Size 2	4	1.90(0.37)	3	1.91(0.68)	1	1.79(0.35)	1	1.82(0.29)	3	2.05(0.33)	4	3.77(0.49)	10	37.85(6.27)	8	15.28(12.28)	5	10.54(0.97)	4	3.74(0.67)	9	32.28(6.74)	6	12.00(4.59)	7	14.07(6.61)		
	Size 3	2	1.61(0.31)	3	2.01(1.10)	1	1.58(0.27)	1	1.57(0.21)	2	1.92(0.27)	2	1.87(0.35)	3	3.41(0.46)	8	37.61(3.49)	6	15.03(10.36)	5	11.03(0.89)	3	3.32(0.55)	7	32.51(3.83)	4	9.42(3.95)	4	9.06(2.44)
	Size 4	2	1.61(0.29)	4	1.70(0.37)	1	1.43(0.21)	1	1.43(0.21)	3	1.67(0.29)	3	1.69(0.36)	4	3.57(0.66)	9	37.57(3.48)	8	9.20(5.36)	8	11.25(1.35)	5	3.51(0.58)	9	33.14(3.69)	7	5.99(6.08)	6	5.85(2.05)
	Size 5	2	1.46(0.26)	4	1.69(0.48)	1	1.40(0.28)	1	1.40(0.23)	3	1.67(0.43)	3	1.68(0.39)	4	3.23(0.65)	9	37.48(2.86)	7	8.21(3.87)	8	11.51(2.21)	5	3.19(0.63)	9	34.15(3.03)	6	3.68(1.40)	6	3.74(0.92)
x264	Size 1	1	8.04(1.30)	1	8.04(3.06)	3	8.72(2.49)	2	8.18(2.78)	3	8.78(4.06)	4	10.43(3.40)	5	14.31(2.24)	5	14.31(2.24)	8	25.72(2.91)	8	24.55(5.85)	6	19.75(10.27)	4	11.81(1.31)	7	18.40(1.66)		
	Size 2	1	3.21(1.95)	1	3.17(1.00)	3	6.50(1.18)	3	6.42(1.20)	3	6.44(2.02)	4	3.65(2.34)	4	8.01(1.23)	7	9.92(2.44)	9	18.83(5.32)	4	7.53(3.80)	5	8.35(1.40)	6	9.45(1.53)	8	15.63(2.24)		
	Size 3	1	1.66(0.57)	2	2.23(0.90)	5	4.92(0.92)	5	4.95(0.85)	4	4.74(0.91)	4	4.72(0.73)	2	3.13(2.43)	6	7.13(3.03)	9	13.66(2.32)	5	5.10(1.65)	7	7.69(0.80)	8	8.95(1.75)	9	13.83(3.45)		
	Size 4	1	1.13(0.63)	2	1.74(0.98)	5	4.07(0.75)	6	4.04(0.86)	4	3.65(1.03)	3	3.32(1.09)	7	3.44(0.39)	6	5.15(2.95)	10	10.24(4.41)	6	3.66(1.82)	8	7.29(0.51)	9	8.24(1.51)	11	12.53(2.12)		
	Size 5	1	0.79(0.33)	2	1.44(0.90)	5	2.88(0.76)	6	2.98(0.77)	3	1.97(0.88)	4	2.37(1.11)	8	7.17(0.60)	8	3.62(3.02)	11	9.19(0.76)	7	3.06(1.89)	9	7.09(0.71)	10	7.45(1.07)	12	11.48(1.54)		
HSMGP	Size 1	1	4.66(1.32)	8	7.09(3.04)	6	16.99(2.70)	5	16.63(2.10)	7	21.65(2.31)	7	21.34(2.41)	11	55.91(19.98)	4	16.00(2.48)	5	16.63(1.38)	3	8.63(1.15)	10	39.60(11.07)	8	26.22(2.77)	9	33.80(9.19)		
	Size 2	1	2.66(0.68)	2	3.69(0.61)	5	11.53(1.37)	6	11.44(1.78)	8	15.59(1.41)	8	16.43(1.52)	2	7.35(0.47)	10	52.54(10.70)	7	15.24(1.32)	8	16.30(2.16)	4	7.43(0.64)	10	43.28(9.80)	9	22.77(3.64)	9	21.71(3.19)
	Size 3	1	1.56(0.20)	2	2.28(0.37)	4	7.38(0.56)	6	7.58(0.56)	7	11.35(0.63)	7	11.26(0.98)	2	7.14(0.35)	10	51.38(9.85)	6	10.05(0.86)	9	15.03(0.66)	3	7.13(0.30)	10	47.42(9.96)	8	14.19(1.59)	8	14.27(1.63)
	Size 4	1	1.49(0.15)	2	2.23(0.39)	3	6.63(0.55)	4	6.88(0.61)	7	10.13(0.57)	8	10.14(0.72)	4	7.16(0.17)	11	49.63(9.43)	6	8.95(0.90)	10	15.07(0.56)	5	7.16(0.22)	11	45.84(9.11)	9	12.83(0.87)	9	12.83(1.15)
	Size 5	1	1.16(0.08)	2	1.94(0.63)	3	5.13(0.25)	3	5.15(0.28)	7	7.46(0.46)	6	7.43(0.34)	10	7.15(0.20)	4	5.87(0.52)	8	8.60(0.38)	5	7.14(0.21)	10	45.16(2.81)	9	9.36(0.58)	9	9.26(0.65)		
HIPA <sup>cc</sup>	Size 1	1	9.07(1.18)	2	9.70(1.28)	3	11.48(0.85)	3	11.08(0.66)	4	12.03(0.93)	4	12.07(1.06)	8	20.49(1.61)	5	13.06(0.51)	7	14.84(0.62)	4	12.17(0.77)	9	17.76(1.12)	6	14.10(1.22)	8	16.86(1.22)		
	Size 2	1	5.55(0.60)	2	6.89(1.44)	3	8.37(0.61)	3	8.46(0.70)	3	8.47(1.10)	3	8.20(1.00)	10	19.67(0.83)	5	11.27(0.44)	6	14.52(0.54)	5	11.36(0.31)	8	18.27(0.65)	4	11.07(0.37)	7	16.02(0.69)		
	Size 3	1	4.39(0.41)	2	4.68(0.90)	3	6.75(0.42)	3	6.69(0.51)	3	6.60(0.75)	5	11.43(0.34)	11	19.35(0.72)	5	10.78(0.28)	8	14.48(0.57)	6	11.21(0.41)	10	18.80(0.84)	4	9.79(0.41)	9	15.79(0.66)		
	Size 4	1	3.22(0.35)	2	3.58(1.00)	4	4.54(0.33)	4	4.47(0.32)	3	4.42(0.22)	3	4.31(0.44)	8	11.13(0.25)	7	10.31(0.14)	10	12.06(0.25)	8	11.03(0.25)	11	18.34(0.52)	6	8.14(0.36)	5	7.95(0.32)		
	Size 5	1	2.39(0.22)	2	2.82(0.57)	2	2.82(0.57)	2	2.69(0.13)	2	2.69(0.15)	2	2.70(0.17)	10	11.01(0.15)	7	10.04(0.09)	8	10.52(0.24)	9	10.93(0.12)	11	18.48(0.34)	5	5.77(0.37)	6	6.20(0.39)		
VP8	Size 1	1	1.59(0.36)	5	4.68(3.27)	4	3.19(0.59)	6	3.32(0.79)	2	2.57(0.70)	3	2.47(0.70)	7	43.69(5.81)	9	13.84(0.76)	7	12.48(0.87)	12	34.53(3.29)	10	22.76(2.40)	11	23.88(1.87)				
	Size 2	4	1.21(0.09)	5	2.39(1.21)	3	1.41(0.18)	4	1.45(0.16)	1	1.24(0.24)	2	1.30(0.22)	4	12.42(0.44)	6	10.30(0.49)	11	23.53(1.46)	7	12.26(0.51)	12	34.52(2.16)	9	20.95(1.45)	10	21.62(1.59)		
	Size 3	1	1.12(0.08)	2	1.93(0.72)	2	1.15(0.15)	2	1.16(0.16)	3	1.18(0.21)	5	12.41(0.34)	11	42.65(6.99)	5	10.11(0.56)	9	25.02(1.93)	6	12.28(0.42)	10	36.18(2.01)	8	20.46(1.19)	8	20.46(1.41)		
	Size 4	1	1.10(0.06)	2	1.54(0.20)	2	1.02(0.08)	2	1.03(0.11)	2	1.07(0.08)	3	12.35(0.31)	8	42.08(2.79)	4	9.81(0.36)	6	26.13(1.14)	3	12.30(0.32)	7	36.70(2.24)	5	20.04(0.84)	9	19.38(0.96)		
	Size 5	1	1.07(0.05)	2	1.45(0.23)	3	0.85(0.03)	2	0.94(0.04)	3	0.94(0.05)	6	12.41(0.27)	12	42.69(1.94)	7	9.71(0.21)	10	15.54(0.77)	5	12.36(2.21)	11	39.07(1.39)	8	16.69(0.50)	9	16.91(0.66)		
Lrzp	Size 1	3	26.40(6.94)</																										