

**Table 1: The Scott-Knott rank ( $r$ ), mean MRE, and standard error (SEM) of all target-tasks and training sizes for DEEPARCH.**

| Size        | $\mathcal{T}_{target}$ | SeMPL |                   | MAML |              | MetaSGD |              | Beetle |             | tEAMS |                   | MORF |              | RF+ <sub>e</sub> |              | DeepPerf+ <sub>e</sub> |                   | SPLConquer+ <sub>e</sub> |             |
|-------------|------------------------|-------|-------------------|------|--------------|---------|--------------|--------|-------------|-------|-------------------|------|--------------|------------------|--------------|------------------------|-------------------|--------------------------|-------------|
|             |                        | $r$   | MRE (SEM)         | $r$  | MRE (SEM)    | $r$     | MRE (SEM)    | $r$    | MRE (SEM)   | $r$   | MRE (SEM)         | $r$  | MRE (SEM)    | $r$              | MRE (SEM)    | $r$                    | MRE (SEM)         | $r$                      | MRE (SEM)   |
| $S_1$       | 1                      | 1     | <b>82.5 (5.4)</b> | 3    | 139.9 (8.8)  | 4       | 163.3 (10.1) | 2      | 120.2 (5.1) | 2     | 120.3 (6.9)       | 6    | 226.5 (14.7) | 7                | 267.9 (22.0) | 1                      | <b>83.8 (0.1)</b> | 5                        | 206.2 (8.9) |
|             | 2                      | 2     | 76.6 (5.8)        | 5    | 172.1 (11.1) | 7       | 217.3 (14.1) | 4      | 152.3 (6.5) | 3     | 139.5 (9.5)       | 8    | 342.1 (25.5) | 6                | 189.4 (14.3) | 1                      | <b>56.6 (0.0)</b> | 3                        | 142.8 (5.1) |
|             | 3                      | 1     | <b>60.4 (3.8)</b> | 4    | 118.9 (8.5)  | 5       | 161.3 (15.7) | 5      | 161.2 (7.8) | 3     | 87.8 (7.0)        | 7    | 239.5 (17.4) | 8                | 271.7 (23.6) | 2                      | 66.4 (0.1)        | 6                        | 197.5 (8.2) |
| $S_2$       | 1                      | 1     | <b>62.7 (3.6)</b> | 4    | 86.8 (5.8)   | 4       | 88.7 (6.3)   | 3      | 84.4 (4.2)  | 2     | 77.3 (4.9)        | 5    | 144.6 (8.2)  | 6                | 156.3 (8.7)  | 3                      | 83.1 (0.1)        | 6                        | 159.6 (6.3) |
|             | 2                      | 2     | 74.5 (4.9)        | 3    | 103.3 (6.1)  | 5       | 127.3 (17.8) | 4      | 112.6 (5.3) | 2     | 80.8 (6.4)        | 6    | 213.7 (9.8)  | 5                | 118.0 (4.9)  | 1                      | <b>54.6 (0.1)</b> | 5                        | 116.0 (4.6) |
|             | 3                      | 1     | <b>50.8 (2.7)</b> | 3    | 68.2 (4.2)   | 4       | 77.2 (6.4)   | 5      | 86.8 (5.1)  | 1     | <b>50.8 (4.0)</b> | 6    | 147.5 (7.6)  | 7                | 158.3 (8.0)  | 2                      | 64.8 (0.1)        | 6                        | 149.4 (5.7) |
| $S_3$       | 1                      | 1     | <b>50.2 (2.3)</b> | 3    | 68.3 (3.0)   | 3       | 69.2 (3.2)   | 3      | 67.4 (3.2)  | 2     | 65.2 (3.1)        | 5    | 97.9 (4.5)   | 6                | 119.1 (4.6)  | 4                      | 82.7 (0.3)        | 7                        | 149.9 (4.6) |
|             | 2                      | 3     | 66.4 (5.0)        | 4    | 87.3 (3.7)   | 5       | 92.3 (3.9)   | 5      | 91.5 (5.3)  | 2     | 61.2 (3.6)        | 7    | 155.6 (6.3)  | 5                | 93.0 (3.6)   | 1                      | <b>52.8 (0.2)</b> | 6                        | 107.9 (3.5) |
|             | 3                      | 2     | 45.4 (3.1)        | 3    | 55.7 (1.7)   | 4       | 59.7 (3.4)   | 4      | 61.0 (2.7)  | 1     | <b>37.5 (2.1)</b> | 5    | 102.2 (4.8)  | 6                | 116.7 (4.9)  | 4                      | 62.3 (0.5)        | 7                        | 136.7 (4.6) |
| $S_4$       | 1                      | 1     | <b>46.9 (2.6)</b> | 3    | 62.9 (2.5)   | 4       | 66.6 (2.8)   | 2      | 59.1 (2.9)  | 2     | 58.3 (2.7)        | 5    | 74.3 (3.0)   | 7                | 102.5 (3.1)  | 6                      | 81.7 (0.3)        | 8                        | 145.8 (3.5) |
|             | 2                      | 3     | 62.6 (5.7)        | 4    | 82.2 (3.3)   | 4       | 82.2 (3.9)   | 4      | 81.0 (4.5)  | 2     | 57.6 (2.4)        | 6    | 117.2 (4.8)  | 4                | 80.2 (2.5)   | 1                      | <b>51.9 (0.3)</b> | 5                        | 107.4 (3.4) |
|             | 3                      | 2     | 40.1 (1.6)        | 3    | 50.1 (1.3)   | 4       | 52.7 (2.9)   | 4      | 52.5 (2.0)  | 1     | <b>33.7 (1.7)</b> | 6    | 75.3 (3.4)   | 7                | 97.3 (3.6)   | 5                      | 60.1 (0.4)        | 8                        | 130.7 (3.6) |
| $S_5$       | 1                      | 1     | <b>42.3 (1.9)</b> | 3    | 59.8 (2.0)   | 3       | 58.9 (3.1)   | 2      | 54.7 (2.8)  | 2     | 53.2 (2.5)        | 4    | 64.3 (2.4)   | 6                | 91.2 (2.4)   | 5                      | 80.0 (0.5)        | 7                        | 144.0 (2.5) |
|             | 2                      | 2     | 55.1 (3.4)        | 4    | 79.2 (3.6)   | 4       | 81.1 (3.6)   | 4      | 77.2 (3.9)  | 1     | <b>50.3 (2.2)</b> | 5    | 101.1 (3.6)  | 3                | 72.8 (1.6)   | 1                      | <b>50.1 (0.4)</b> | 6                        | 107.2 (2.2) |
|             | 3                      | 2     | 35.9 (1.1)        | 4    | 47.2 (1.4)   | 3       | 45.1 (1.6)   | 4      | 46.3 (1.3)  | 1     | <b>30.1 (1.8)</b> | 5    | 61.8 (2.4)   | 6                | 84.4 (2.2)   | 5                      | 60.4 (0.3)        | 7                        | 135.0 (2.6) |
| Average $r$ |                        | 1.7   |                   | 3.5  |              | 4.2     |              | 3.7    |             | 1.8   |                   | 5.7  |              | 5.9              |              | 2.8                    |                   | 6.1                      |             |

**Table 2: The Scott-Knott rank ( $r$ ), mean MRE, and standard error (SEM) of all target-tasks and training sizes for SAC.**

| Size        | $\mathcal{T}_{target}$ | SeMPL |                      | MAML |                      | MetaSGD |                      | Beetle |                     | tEAMS |                    | MORF |                   | RF+ <sub>e</sub> |                | DeepPerf+ <sub>e</sub> |               | SPLConquer+ <sub>e</sub> |                |
|-------------|------------------------|-------|----------------------|------|----------------------|---------|----------------------|--------|---------------------|-------|--------------------|------|-------------------|------------------|----------------|------------------------|---------------|--------------------------|----------------|
|             |                        | $r$   | MRE (SEM)            | $r$  | MRE (SEM)            | $r$     | MRE (SEM)            | $r$    | MRE (SEM)           | $r$   | MRE (SEM)          | $r$  | MRE (SEM)         | $r$              | MRE (SEM)      | $r$                    | MRE (SEM)     | $r$                      | MRE (SEM)      |
| $S_1$       | 1                      | 2     | 1353.0 (191.7)       | 1    | <b>775.0 (148.5)</b> | 1       | <b>909.4 (124.4)</b> | 2      | 1358.2 (237.9)      | 2     | 1317.1 (98.8)      | 3    | 2437.0 (231.2)    | 3                | 2611.2 (218.0) | 4                      | 2811.5 (50.3) | 3                        | 2568.8 (245.6) |
|             | 2                      | 2     | 105.4 (8.4)          | 2    | 105.1 (8.1)          | 1       | <b>91.7 (9.1)</b>    | 1      | <b>88.1 (7.1)</b>   | 1     | <b>80.9 (16.3)</b> | 2    | 113.9 (8.5)       | 3                | 191.0 (5.1)    | 4                      | 207.1 (1.0)   | 5                        | 346.5 (12.3)   |
|             | 3                      | 1     | <b>41.9 (6.7)</b>    | 3    | 81.4 (8.9)           | 3       | 73.9 (9.6)           | 3      | 80.5 (13.3)         | 2     | 62.7 (12.8)        | 1    | <b>47.4 (3.1)</b> | 4                | 224.5 (5.2)    | 5                      | 265.0 (0.6)   | 6                        | 405.1 (18.0)   |
| $S_2$       | 1                      | 1     | <b>754.1 (143.1)</b> | 1    | <b>616.3 (114.0)</b> | 1       | <b>670.3 (96.1)</b>  | 1      | <b>715.7 (91.9)</b> | 2     | 985.0 (149.4)      | 3    | 1926.7 (169.9)    | 5                | 2440.4 (128.1) | 4                      | 2342.8 (61.4) | 5                        | 2472.7 (143.8) |
|             | 2                      | 2     | 59.1 (4.0)           | 3    | 70.7 (4.5)           | 1       | <b>52.8 (5.4)</b>    | 2      | 60.3 (3.8)          | 4     | 86.1 (18.2)        | 3    | 70.1 (4.4)        | 5                | 163.0 (3.0)    | 6                      | 202.5 (1.4)   | 7                        | 300.5 (10.9)   |
|             | 3                      | 1     | <b>26.9 (2.4)</b>    | 4    | 49.6 (4.1)           | 3       | 38.0 (3.9)           | 2      | 31.7 (2.5)          | 3     | 39.8 (4.4)         | 1    | <b>29.1 (1.7)</b> | 5                | 201.4 (2.5)    | 6                      | 258.9 (0.7)   | 7                        | 299.4 (14.2)   |
| $S_3$       | 1                      | 1     | <b>438.6 (90.4)</b>  | 1    | <b>469.0 (79.9)</b>  | 1       | <b>482.7 (77.1)</b>  | 2      | 577.6 (108.3)       | 3     | 918.9 (173.4)      | 4    | 1505.5 (128.7)    | 5                | 2319.3 (99.7)  | 5                      | 2332.8 (63.6) | 6                        | 2450.0 (123.6) |
|             | 2                      | 1     | <b>30.8 (2.3)</b>    | 4    | 47.1 (2.7)           | 2       | 40.9 (3.5)           | 5      | 52.1 (3.0)          | 6     | 107.4 (28.6)       | 3    | 44.3 (2.5)        | 7                | 156.7 (1.9)    | 8                      | 197.4 (1.6)   | 9                        | 251.0 (7.7)    |
|             | 3                      | 1     | <b>20.9 (1.1)</b>    | 5    | 36.5 (1.6)           | 4       | 33.4 (2.7)           | 3      | 25.2 (1.9)          | 6     | 40.9 (4.6)         | 2    | 22.3 (1.4)        | 7                | 193.1 (1.9)    | 8                      | 254.9 (0.8)   | 9                        | 303.3 (11.8)   |
| $S_4$       | 1                      | 1     | <b>287.3 (72.9)</b>  | 2    | 551.4 (147.1)        | 2       | 521.4 (98.1)         | 2      | 484.6 (106.2)       | 3     | 842.4 (126.7)      | 4    | 1380.6 (111.1)    | 5                | 2324.6 (106.0) | 6                      | 2420.8 (54.5) | 6                        | 2503.5 (121.2) |
|             | 2                      | 1     | <b>32.8 (2.2)</b>    | 3    | 38.9 (2.1)           | 2       | 34.7 (2.5)           | 4      | 44.9 (2.3)          | 5     | 116.1 (31.8)       | 2    | 35.8 (2.0)        | 6                | 153.9 (2.1)    | 8                      | 369.6 (27.0)  | 7                        | 239.2 (7.3)    |
|             | 3                      | 1     | <b>17.7 (0.9)</b>    | 3    | 34.6 (1.8)           | 2       | 27.7 (1.7)           | 2      | 27.5 (2.7)          | 3     | 38.7 (5.5)         | 1    | <b>18.4 (1.2)</b> | 4                | 190.0 (1.9)    | 5                      | 256.2 (30.4)  | 6                        | 295.5 (12.7)   |
| $S_5$       | 1                      | 1     | <b>234.4 (63.4)</b>  | 1    | <b>281.5 (72.9)</b>  | 1       | <b>311.3 (90.7)</b>  | 2      | 378.0 (89.5)        | 3     | 712.0 (103.4)      | 4    | 1142.8 (116.7)    | 6                | 2175.3 (126.3) | 5                      | 2021.9 (74.9) | 7                        | 2346.8 (118.5) |
|             | 2                      | 1     | <b>30.4 (2.9)</b>    | 2    | 37.8 (2.0)           | 1       | <b>31.6 (3.0)</b>    | 2      | 38.2 (2.2)          | 3     | 52.8 (7.4)         | 1    | <b>31.3 (2.1)</b> | 4                | 150.3 (1.7)    | 6                      | 278.2 (15.7)  | 5                        | 250.0 (7.5)    |
|             | 3                      | 1     | <b>15.9 (0.7)</b>    | 5    | 31.4 (1.4)           | 4       | 26.7 (2.7)           | 3      | 19.4 (1.5)          | 6     | 50.7 (9.6)         | 2    | 17.1 (1.1)        | 7                | 189.4 (1.5)    | 7                      | 201.7 (18.2)  | 8                        | 262.4 (14.6)   |
| Average $r$ |                        | 1.2   |                      | 2.7  |                      | 1.9     |                      | 2.4    |                     | 3.5   |                    | 2.4  |                   | 5.1              |                | 5.8                    |               | 6.4                      |                |

**Table 3: The Scott-Knott rank ( $r$ ), mean MRE, and standard error (SEM) of all target-tasks and training sizes for SQLITE.**

| Size        | $\mathcal{T}_{target}$ | SeMPL |                  | MAML |           | MetaSGD |           | Beetle |                  | tEAMS |                  | MORF |                  | RF+ <sub>e</sub> |           | DeepPerf+ <sub>e</sub> |            | SPLConquer+ <sub>e</sub> |            |
|-------------|------------------------|-------|------------------|------|-----------|---------|-----------|--------|------------------|-------|------------------|------|------------------|------------------|-----------|------------------------|------------|--------------------------|------------|
|             |                        | $r$   | MRE (SEM)        | $r$  | MRE (SEM) | $r$     | MRE (SEM) | $r$    | MRE (SEM)        | $r$   | MRE (SEM)        | $r$  | MRE (SEM)        | $r$              | MRE (SEM) | $r$                    | MRE (SEM)  | $r$                      | MRE (SEM)  |
| $S_1$       | 1                      | 1     | <b>1.0 (0.0)</b> | 5    | 1.5 (0.1) | 3       | 1.2 (0.1) | 4      | 1.2 (0.1)        | 4     | 1.2 (0.0)        | 2    | 1.1 (0.0)        | 6                | 3.7 (0.0) | 7                      | 4.5 (0.0)  | 8                        | 9.6 (0.4)  |
|             | 2                      | 1     | <b>1.0 (0.0)</b> | 4    | 1.3 (0.0) | 2       | 1.0 (0.1) | 3      | 1.1 (0.1)        | 4     | 1.3 (0.2)        | 4    | 1.2 (0.0)        | 5                | 7.8 (0.1) | 6                      | 10.7 (0.0) | 7                        | 12.2 (0.4) |
|             | 3                      | 1     | <b>1.1 (0.1)</b> | 5    | 2.0 (0.5) | 4       | 1.6 (0.3) | 2      | 1.1 (0.1)        | 3     | 1.3 (0.1)        | 2    | 1.2 (0.0)        | 5                | 2.3 (0.0) | 6                      | 2.6 (0.0)  | 7                        | 9.4 (0.4)  |
|             | 4                      | 1     | <b>1.2 (0.1)</b> | 4    | 1.7 (0.1) | 5       | 1.8 (0.3) | 2      | 1.3 (0.1)        | 3     | 1.4 (0.0)        | 1    | <b>1.2 (0.0)</b> | 6                | 2.2 (0.0) | 7                      | 2.5 (0.0)  | 8                        | 9.4 (0.4)  |
| $S_2$       | 1                      | 2     | 0.9 (0.0)        | 5    | 1.2 (0.0) | 4       | 1.1 (0.1) | 3      | 1.0 (0.0)        | 3     | 1.0 (0.0)        | 1    | <b>0.9 (0.0)</b> | 6                | 3.6 (0.0) | 8                      | 4.5 (0.0)  | 7                        | 4.0 (0.1)  |
|             | 2                      | 1     | <b>0.8 (0.0)</b> | 4    | 1.0 (0.0) | 2       | 0.9 (0.1) | 3      | 0.9 (0.1)        | 2     | 0.9 (0.0)        | 3    | 0.9 (0.0)        | 5                | 7.9 (0.0) | 6                      | 10.6 (0.0) | 5                        | 7.9 (0.1)  |
|             | 3                      | 1     | <b>0.9 (0.0)</b> | 4    | 1.2 (0.0) | 3       | 1.1 (0.1) | 2      | 1.0 (0.0)        | 3     | 1.1 (0.0)        | 1    | <b>0.9 (0.0)</b> | 5                | 2.2 (0.0) | 6                      | 2.6 (0.0)  | 7                        | 3.0 (0.1)  |
|             | 4                      | 1     | <b>1.0 (0.0)</b> | 3    | 1.3 (0.0) | 2       | 1.2 (0.1) | 2      | 1.1 (0.0)        | 2     | 1.1 (0.0)        | 1    | <b>1.0 (0.0)</b> | 4                | 2.1 (0.0) | 5                      | 2.5 (0.0)  | 6                        | 3.0 (0.1)  |
| $S_3$       | 1                      | 2     | 0.9 (0.0)        | 5    | 1.1 (0.0) | 5       | 1.1 (0.1) | 3      | 0.9 (0.0)        | 4     | 0.9 (0.0)        | 1    | <b>0.9 (0.0)</b> | 6                | 3.5 (0.0) | 8                      | 4.4 (0.0)  | 7                        | 3.6 (0.1)  |
|             | 2                      | 1     | <b>0.7 (0.0)</b> | 4    | 0.9 (0.0) | 3       | 0.8 (0.1) | 3      | 0.8 (0.0)        | 2     | 0.8 (0.0)        | 1    | <b>0.7 (0.0)</b> | 5                | 7.9 (0.0) | 6                      | 10.6 (0.0) | 5                        | 7.9 (0.1)  |
|             | 3                      | 1     | <b>0.9 (0.0)</b> | 3    | 1.1 (0.0) | 3       | 1.1 (0.1) | 1      | <b>0.9 (0.0)</b> | 2     | 0.9 (0.0)        | 1    | <b>0.9 (0.0)</b> | 4                | 2.1 (0.0) | 6                      | 2.6 (0.0)  | 5                        | 2.3 (0.1)  |
|             | 4                      | 1     | <b>1.0 (0.0)</b> | 3    | 1.2 (0.0) | 4       | 1.3 (0.1) | 2      | 1.1 (0.0)        | 2     | 1.1 (0.0)        | 1    | <b>1.0 (0.0)</b> | 5                | 2.0 (0.0) | 7                      | 2.5 (0.0)  | 6                        | 2.3 (0.1)  |
| $S_4$       | 1                      | 1     | <b>0.8 (0.0)</b> | 4    | 0.9 (0.0) | 4       | 0.9 (0.1) | 1      | <b>0.8 (0.0)</b> | 3     | 0.9 (0.0)        | 2    | 0.9 (0.0)        | 5                | 3.5 (0.0) | 6                      | 4.4 (0.0)  | 5                        | 3.5 (0.0)  |
|             | 2                      | 2     | 0.7 (0.0)        | 4    | 0.8 (0.0) | 3       | 0.8 (0.0) | 3      | 0.8 (0.0)        | 2     | 0.7 (0.0)        | 1    | <b>0.7 (0.0)</b> | 6                | 7.9 (0.0) | 7                      | 10.5 (0.0) | 5                        | 7.7 (0.1)  |
|             | 3                      | 1     | <b>0.9 (0.0)</b> | 3    | 1.0 (0.0) | 3       | 1.0 (0.0) | 2      | 0.9 (0.0)        | 1     | <b>0.9 (0.0)</b> | 2    | 0.9 (0.0)        | 4                | 2.1 (0.0) | 6                      | 2.5 (0.0)  | 5                        | 2.2 (0.0)  |
|             | 4                      | 1     | <b>1.0 (0.0)</b> | 4    | 1.1 (0.0) | 4       | 1.1 (0.1) | 3      | 1.0 (0.0)        | 2     | 1.0 (0.0)        | 3    | 1.0 (0.0)        | 5                | 2.1 (0.0) | 6                      | 2.5 (0.0)  | 5                        | 2.1 (0.0)  |
| $S_5$       | 1                      | 1     | <b>0.8 (0.0)</b> | 4    | 0.9 (0.0) | 4       | 1.0 (0.1) | 3      | 0.9 (0.0)        | 3     | 0.9 (0.0)        | 2    | 0.8 (0.0)        | 6                | 3.5 (0.0) | 7                      | 4.4 (0.0)  | 5                        | 3.5 (0.0)  |
|             | 2                      | 1     | <b>0.7 (0.0)</b> | 3    | 0.8 (0.0) | 2       | 0.7 (0.0) | 1      | <b>0.7 (0.0)</b> | 1     | <b>0.7 (0.0)</b> | 1    | <b>0.7 (0.0)</b> | 4                | 7.9 (0.0) | 5                      | 10.5 (0.0) | 4                        | 7.9 (0.0)  |
|             | 3                      | 2     | 0.9 (0.0)        | 5    | 0.9 (0.0) | 4       | 0.9 (0.0) | 1      | <b>0.8 (0.0)</b> | 3     | 0.9 (0.0)        | 4    | 0.9 (0.0)        | 6                | 2.1 (0.0) | 8                      | 2.5 (0.0)  | 7                        | 2.2 (0.0)  |
|             | 4                      | 1     | <b>1.0 (0.0)</b> | 3    | 1.0 (0.0) | 4       | 1.2 (0.1) | 1      | <b>1.0 (0.0)</b> | 2     | 1.0 (0.0)        | 3    | 1.0 (0.0)        | 5                | 2.1 (0.0) | 7                      | 2.4 (0.0)  | 6                        | 2.1 (0.0)  |
| Average $r$ |                        | 1.2   |                  | 4    |           | 3.4     |           | 2.2    |                  | 2.5   |                  | 1.9  |                  | 5.2              |           | 6.5                    |            | 6                        |            |

**Table 4: The Scott-Knott rank ( $r$ ), mean MRE, and standard error (SEM) of all target-tasks and training sizes for NGINX.**

| Size        | $\mathcal{T}_{target}$ | SeMPL      |                    | MAML |              | MetaSGD |              | Beetle |              | tEAMS    |                   | MORF |              | RF+ <sub>e</sub> |                  | DeepPerf+ <sub>e</sub> |                   | SPLConquer+ <sub>e</sub> |              |
|-------------|------------------------|------------|--------------------|------|--------------|---------|--------------|--------|--------------|----------|-------------------|------|--------------|------------------|------------------|------------------------|-------------------|--------------------------|--------------|
|             |                        | $r$        | MRE (SEM)          | $r$  | MRE (SEM)    | $r$     | MRE (SEM)    | $r$    | MRE (SEM)    | $r$      | MRE (SEM)         | $r$  | MRE (SEM)    | $r$              | MRE (SEM)        | $r$                    | MRE (SEM)         | $r$                      | MRE (SEM)    |
| $S_1$       | 1                      | 3          | 130.2 (23.3)       | 8    | 578.2 (43.5) | 5       | 209.2 (21.4) | 5      | 207.2 (27.4) | 2        | 101.7 (15.8)      | 6    | 298.1 (22.4) | 4                | 165.9 (22.6)     | <b>1</b>               | <b>50.5 (1.0)</b> | 7                        | 422.7 (16.5) |
|             | 2                      | 3          | 186.4 (34.2)       | 7    | 619.7 (46.2) | 4       | 264.5 (44.9) | 4      | 256.2 (35.1) | 2        | 105.4 (17.7)      | 5    | 357.2 (25.7) | 4                | 229.1 (33.7)     | <b>1</b>               | <b>26.9 (1.9)</b> | 6                        | 520.7 (15.0) |
|             | 3                      | 3          | 313.4 (48.7)       | 6    | 745.1 (55.3) | 3       | 341.8 (52.3) | 3      | 321.0 (36.1) | 2        | 82.4 (12.4)       | 4    | 496.2 (35.3) | 3                | 346.9 (51.1)     | <b>1</b>               | <b>31.6 (1.7)</b> | 5                        | 680.3 (15.0) |
|             | 4                      | 3          | 252.7 (51.3)       | 7    | 743.6 (55.2) | 5       | 468.7 (78.7) | 4      | 319.6 (38.6) | 2        | 65.2 (9.0)        | 5    | 496.4 (35.4) | 4                | 345.7 (51.3)     | <b>1</b>               | <b>34.3 (2.3)</b> | 6                        | 679.6 (15.0) |
| $S_2$       | 1                      | <b>1</b>   | <b>26.4 (3.2)</b>  | 7    | 585.3 (30.2) | 4       | 69.0 (11.7)  | 3      | 43.6 (7.6)   | <b>1</b> | <b>27.1 (3.9)</b> | 5    | 100.3 (14.5) | 3                | 43.3 (13.2)      | 2                      | 30.4 (2.1)        | 6                        | 443.7 (14.7) |
|             | 2                      | <b>1</b>   | <b>11.7 (1.2)</b>  | 8    | 639.7 (31.5) | 5       | 90.5 (21.7)  | 4      | 56.4 (11.9)  | 3        | 25.8 (4.0)        | 6    | 117.9 (18.9) | 4                | 50.5 (19.8)      | 2                      | 18.9 (1.0)        | 7                        | 525.0 (11.3) |
|             | 3                      | <b>1</b>   | <b>31.8 (20.7)</b> | 5    | 757.8 (37.1) | 3       | 220.8 (65.9) | 2      | 78.7 (19.6)  | <b>1</b> | <b>23.7 (3.0)</b> | 3    | 167.4 (28.4) | 2                | 81.6 (30.0)      | <b>1</b>               | <b>24.9 (1.3)</b> | 4                        | 669.5 (9.9)  |
|             | 4                      | <b>1</b>   | <b>36.9 (20.7)</b> | 6    | 756.0 (37.2) | 3       | 119.8 (49.5) | 2      | 59.9 (17.3)  | <b>1</b> | <b>21.5 (2.5)</b> | 4    | 167.4 (28.4) | 2                | 81.9 (30.2)      | <b>1</b>               | <b>28.8 (2.3)</b> | 5                        | 668.3 (9.8)  |
| $S_3$       | 1                      | 2          | 17.0 (1.4)         | 7    | 577.2 (22.9) | 5       | 70.9 (36.7)  | 3      | 18.7 (1.5)   | <b>1</b> | <b>13.5 (1.5)</b> | 5    | 45.6 (7.3)   | 2                | 16.3 (0.5)       | 4                      | 27.4 (0.9)        | 6                        | 434.1 (10.9) |
|             | 2                      | <b>1</b>   | <b>9.1 (1.2)</b>   | 7    | 630.7 (23.8) | 5       | 43.7 (12.6)  | 3      | 19.1 (2.3)   | 2        | 13.2 (1.5)        | 5    | 51.6 (9.4)   | <b>1</b>         | <b>9.2 (0.9)</b> | 4                      | 24.5 (2.4)        | 6                        | 517.3 (8.9)  |
|             | 3                      | <b>1</b>   | <b>5.4 (0.5)</b>   | 7    | 749.8 (29.3) | 5       | 83.4 (43.7)  | 4      | 26.9 (6.5)   | 2        | 15.0 (1.8)        | 5    | 73.7 (14.1)  | 3                | 20.2 (1.4)       | 4                      | 29.4 (2.4)        | 6                        | 658.6 (8.6)  |
|             | 4                      | <b>1</b>   | <b>6.7 (0.8)</b>   | 8    | 750.9 (29.1) | 5       | 28.9 (3.6)   | 3      | 19.8 (3.0)   | 2        | 15.6 (2.4)        | 6    | 73.8 (14.2)  | 3                | 20.1 (1.4)       | 4                      | 25.4 (1.7)        | 7                        | 657.4 (8.5)  |
| $S_4$       | 1                      | <b>1</b>   | <b>10.4 (0.7)</b>  | 7    | 567.1 (14.8) | 5       | 94.5 (42.4)  | 2      | 15.9 (1.1)   | <b>1</b> | <b>10.7 (1.4)</b> | 3    | 21.8 (5.1)   | 2                | 15.1 (0.3)       | 4                      | 27.9 (0.9)        | 6                        | 433.3 (10.3) |
|             | 2                      | 2          | 7.4 (0.6)          | 7    | 616.2 (16.7) | 5       | 23.5 (3.3)   | 4      | 20.0 (4.0)   | 3        | 11.2 (1.7)        | 5    | 23.3 (6.8)   | <b>1</b>         | <b>6.5 (0.5)</b> | 4                      | 19.2 (1.7)        | 6                        | 516.0 (8.1)  |
|             | 3                      | <b>1</b>   | <b>4.6 (0.3)</b>   | 6    | 733.5 (21.1) | 4       | 28.5 (6.0)   | 2      | 10.9 (1.5)   | 2        | 10.6 (0.9)        | 4    | 32.9 (10.2)  | 3                | 16.5 (0.7)       | 4                      | 27.7 (2.2)        | 5                        | 656.9 (7.9)  |
|             | 4                      | <b>1</b>   | <b>5.2 (0.3)</b>   | 7    | 732.3 (21.2) | 5       | 78.3 (53.3)  | 2      | 11.1 (1.3)   | 2        | 10.7 (1.0)        | 4    | 33.0 (10.2)  | 3                | 16.4 (0.7)       | 4                      | 25.6 (1.8)        | 6                        | 655.8 (7.8)  |
| $S_5$       | 1                      | <b>1</b>   | <b>6.4 (0.6)</b>   | 8    | 571.5 (16.3) | 6       | 31.4 (3.8)   | 4      | 13.2 (1.2)   | 2        | 7.2 (0.7)         | 3    | 9.4 (1.7)    | 4                | 13.9 (0.2)       | 5                      | 27.2 (1.1)        | 7                        | 431.2 (6.5)  |
|             | 2                      | 2          | 7.9 (1.6)          | 7    | 617.5 (17.8) | 5       | 81.3 (45.3)  | 3      | 10.5 (0.9)   | 2        | 7.2 (0.8)         | 2    | 7.8 (2.1)    | <b>1</b>         | <b>4.8 (0.2)</b> | 4                      | 19.2 (0.9)        | 6                        | 514.0 (5.5)  |
|             | 3                      | <b>1</b>   | <b>4.2 (0.3)</b>   | 8    | 728.3 (22.4) | 6       | 118.7 (68.2) | 3      | 10.5 (2.3)   | 2        | 6.3 (0.5)         | 3    | 9.6 (3.1)    | 4                | 14.8 (0.4)       | 5                      | 24.2 (1.1)        | 7                        | 650.0 (5.3)  |
|             | 4                      | <b>1</b>   | <b>4.9 (0.3)</b>   | 7    | 727.4 (22.4) | 5       | 106.0 (61.0) | 2      | 8.2 (0.6)    | 2        | 7.5 (0.3)         | 2    | 9.6 (3.1)    | 3                | 14.7 (0.4)       | 4                      | 22.4 (1.3)        | 6                        | 648.9 (5.3)  |
| Average $r$ |                        | <b>1.6</b> |                    | 7    |              | 4.7     |              | 3.1    |              | 1.9      |                   | 4.2  |              | 2.8              |                  | 3                      |                   | 6                        |              |

**Table 5: The Scott-Knott rank ( $r$ ), mean MRE, and standard error (SEM) of all target-tasks and training sizes for SPEAR.**

| Size        | $\mathcal{T}_{target}$ | SeMPL      |                    | MAML |                | MetaSGD |               | Beetle   |                   | tEAMS |              | MORF |              | RF+ <sub>e</sub> |                   | DeepPerf+ <sub>e</sub> |             | SPLConquer+ <sub>e</sub> |                |
|-------------|------------------------|------------|--------------------|------|----------------|---------|---------------|----------|-------------------|-------|--------------|------|--------------|------------------|-------------------|------------------------|-------------|--------------------------|----------------|
|             |                        | $r$        | MRE (SEM)          | $r$  | MRE (SEM)      | $r$     | MRE (SEM)     | $r$      | MRE (SEM)         | $r$   | MRE (SEM)    | $r$  | MRE (SEM)    | $r$              | MRE (SEM)         | $r$                    | MRE (SEM)   | $r$                      | MRE (SEM)      |
| $S_1$       | 4                      | 2          | 44.5 (8.8)         | 6    | 116.3 (13.6)   | 4       | 56.7 (5.5)    | 3        | 50.1 (3.0)        | 6     | 105.0 (10.7) | 5    | 74.6 (8.0)   | <b>1</b>         | <b>34.3 (0.8)</b> | 2                      | 42.9 (0.0)  | 7                        | 191.1 (14.1)   |
|             | 5                      | <b>1</b>   | <b>59.3 (15.3)</b> | 5    | 1149.8 (202.1) | 4       | 589.6 (207.0) | 4        | 595.6 (194.2)     | 3     | 378.0 (72.2) | 3    | 405.4 (75.3) | 3                | 357.5 (18.6)      | 2                      | 304.5 (0.5) | 6                        | 1955.3 (133.9) |
|             | 6                      | <b>1</b>   | <b>34.1 (2.1)</b>  | 6    | 401.3 (63.5)   | 5       | 192.6 (60.6)  | 2        | 57.0 (6.4)        | 5     | 181.3 (31.6) | 5    | 179.8 (30.3) | 4                | 117.3 (7.2)       | 3                      | 82.6 (0.1)  | 7                        | 784.7 (55.0)   |
| $S_2$       | 4                      | 2          | 34.2 (1.3)         | 5    | 50.3 (3.3)     | 4       | 45.1 (2.4)    | 4        | 45.6 (2.5)        | 6     | 57.7 (4.3)   | 3    | 42.3 (2.1)   | <b>1</b>         | <b>32.7 (0.6)</b> | 3                      | 42.9 (0.0)  | 7                        | 71.5 (6.9)     |
|             | 5                      | <b>1</b>   | <b>30.1 (2.6)</b>  | 4    | 124.1 (21.5)   | 3       | 83.6 (14.0)   | 3        | 76.8 (21.6)       | 4     | 110.1 (15.6) | 2    | 66.2 (1.8)   | 6                | 357.0 (11.5)      | 5                      | 304.5 (0.4) | 7                        | 746.9 (64.6)   |
|             | 6                      | 3          | 52.4 (33.0)        | 3    | 62.5 (7.1)     | 3       | 60.1 (7.5)    | <b>1</b> | <b>34.0 (2.8)</b> | 3     | 62.7 (5.3)   | 2    | 42.2 (1.6)   | 5                | 117.1 (4.6)       | 4                      | 82.5 (0.1)  | 6                        | 287.7 (27.5)   |
| $S_3$       | 4                      | 3          | 40.9 (1.9)         | 4    | 44.7 (2.4)     | 4       | 42.5 (2.5)    | <b>1</b> | <b>31.3 (1.2)</b> | 5     | 50.9 (2.7)   | 3    | 38.9 (1.8)   | 2                | 32.5 (0.5)        | 4                      | 42.8 (0.0)  | 6                        | 68.7 (6.4)     |
|             | 5                      | <b>1</b>   | <b>28.4 (3.4)</b>  | 5    | 91.0 (9.7)     | 4       | 74.9 (5.8)    | 2        | 37.0 (1.8)        | 4     | 78.2 (9.1)   | 3    | 62.7 (1.2)   | 7                | 331.3 (7.5)       | 6                      | 304.8 (0.5) | 8                        | 702.2 (61.1)   |
|             | 6                      | <b>1</b>   | <b>19.0 (2.2)</b>  | 4    | 47.5 (3.3)     | 4       | 53.0 (6.7)    | 2        | 29.2 (1.5)        | 4     | 47.8 (3.6)   | 3    | 39.1 (1.2)   | 6                | 106.8 (2.9)       | 5                      | 82.4 (0.1)  | 7                        | 267.6 (25.9)   |
| $S_4$       | 4                      | 3          | 37.7 (1.6)         | 4    | 41.3 (2.0)     | 4       | 40.8 (1.5)    | <b>1</b> | <b>30.3 (0.9)</b> | 6     | 44.8 (2.1)   | 3    | 37.2 (1.3)   | 2                | 32.4 (0.5)        | 5                      | 42.8 (0.0)  | 7                        | 62.8 (5.0)     |
|             | 5                      | <b>1</b>   | <b>26.2 (2.7)</b>  | 6    | 85.9 (8.1)     | 4       | 65.4 (1.8)    | 2        | 34.8 (1.5)        | 5     | 70.5 (5.4)   | 3    | 60.6 (1.0)   | 8                | 319.0 (6.9)       | 7                      | 304.2 (0.5) | 9                        | 625.5 (48.5)   |
|             | 6                      | <b>1</b>   | <b>21.1 (2.2)</b>  | 4    | 42.4 (1.8)     | 4       | 41.7 (2.0)    | 2        | 26.6 (1.0)        | 5     | 45.3 (3.0)   | 3    | 37.2 (0.9)   | 7                | 101.8 (2.7)       | 6                      | 82.5 (0.1)  | 8                        | 240.4 (20.9)   |
| $S_5$       | 4                      | 2          | 32.6 (1.0)         | 5    | 39.9 (1.9)     | 4       | 38.3 (1.4)    | <b>1</b> | <b>27.9 (0.7)</b> | 5     | 40.6 (1.6)   | 3    | 36.7 (1.2)   | 2                | 32.1 (0.3)        | 6                      | 42.8 (0.0)  | 7                        | 58.9 (3.9)     |
|             | 5                      | <b>1</b>   | <b>29.0 (3.1)</b>  | 4    | 77.6 (5.5)     | 3       | 61.8 (1.0)    | <b>1</b> | <b>30.8 (1.5)</b> | 4     | 72.3 (6.2)   | 2    | 59.5 (0.9)   | 6                | 312.1 (6.6)       | 5                      | 305.0 (0.6) | 7                        | 569.3 (37.4)   |
|             | 6                      | <b>1</b>   | <b>14.6 (1.0)</b>  | 4    | 42.1 (1.8)     | 4       | 40.6 (1.2)    | 2        | 25.2 (1.0)        | 5     | 46.4 (3.0)   | 3    | 36.5 (0.9)   | 7                | 99.1 (2.5)        | 6                      | 82.3 (0.1)  | 8                        | 220.1 (16.1)   |
| Average $r$ |                        | <b>1.6</b> |                    | 4.6  |                | 3.9     |               | 2.1      |                   | 4.7   |              | 3.1  |              | 4.5              |                   | 4.6                    |             | 7.1                      |                |

**Table 6: The Scott-Knott rank ( $r$ ), mean MRE, and standard error (SEM) of all target-tasks and training sizes for STORM.**

| Size    | $\mathcal{T}_{target}$ | SeMPL |              | MAML |              | MetaSGD |                 | Beetle |               | tEAMS |                | MORF       |                     | RF+ <sub>e</sub> |                  | DeepPerf+ <sub>e</sub> |                 | SPLConquer+ <sub>e</sub> |                  |
|---------|------------------------|-------|--------------|------|--------------|---------|-----------------|--------|---------------|-------|----------------|------------|---------------------|------------------|------------------|------------------------|-----------------|--------------------------|------------------|
|         |                        | $r$   | MRE (SEM)    | $r$  | MRE (SEM)    | $r$     | MRE (SEM)       | $r$    | MRE (SEM)     | $r$   | MRE (SEM)      | $r$        | MRE (SEM)           | $r$              | MRE (SEM)        | $r$                    | MRE (SEM)       | $r$                      | MRE (SEM)        |
| $S_1$   | 1                      | 2     | 31.2 (1.7)   | 3    | 281.7 (41.9) | 5       | 2369.9 (2105.5) | 4      | 340.1 (25.9)  | 5     | 2369.2 (190.0) | <b>1</b>   | <b>21.8 (2.0)</b>   | 8                | 36239.4 (740.3)  | 6                      | 9416.9 (53.5)   | 7                        | 28147.9 (679.9)  |
|         | 2                      | 4     | 144.5 (29.1) | 5    | 208.0 (31.8) | 3       | 100.3 (26.5)    | 2      | 21.6 (1.4)    | 6     | 681.1 (138.0)  | <b>1</b>   | <b>14.3 (1.3)</b>   | 9                | 71222.3 (1237.7) | 8                      | 68082.6 (261.6) | 7                        | 56364.5 (1363.3) |
|         | 3                      | 2     | 251.3 (18.3) | 3    | 363.2 (24.9) | 4       | 608.4 (294.7)   | 5      | 1197.5 (61.3) | 4     | 715.8 (149.0)  | <b>1</b>   | <b>159.0 (20.2)</b> | 7                | 52452.0 (1447.2) | 8                      | 59449.7 (248.0) | 6                        | 39741.6 (1437.2) |
| $S_2$   | 1                      | 2     | 31.4 (2.6)   | 3    | 303.0 (37.3) | 3       | 339.8 (53.9)    | 3      | 297.0 (12.7)  | 4     | 2790.9 (159.2) | <b>1</b>   | <b>14.2 (0.3)</b>   | 7                | 36884.2 (477.3)  | 5                      | 9879.8 (138.0)  | 6                        | 28602.0 (652.3)  |
|         | 2                      | 4     | 119.0 (21.9) | 5    | 145.4 (25.1) | 3       | 54.8 (9.3)      | 2      | 17.5 (1.2)    | 6     | 536.5 (83.2)   | <b>1</b>   | <b>10.1 (0.3)</b>   | 9                | 73177.1 (954.3)  | 8                      | 68074.6 (361.5) | 7                        | 55569.5 (1267.6) |
|         | 3                      | 2     | 214.9 (15.2) | 3    | 323.5 (21.3) | 3       | 316.9 (36.5)    | 5      | 1041.5 (65.2) | 4     | 625.8 (46.6)   | <b>1</b>   | <b>154.7 (25.1)</b> | 7                | 53872.3 (1024.4) | 8                      | 59420.6 (310.6) | 6                        | 41228.5 (1375.8) |
| $S_3$   | 1                      | 2     | 27.4 (1.2)   | 3    | 264.6 (25.3) | 3       | 250.3 (44.8)    | 3      | 278.1 (11.9)  | 4     | 2800.0 (144.2) | <b>1</b>   | <b>12.9 (0.2)</b>   | 7                | 36325.8 (401.9)  | 5                      | 10229.0 (180.6) | 6                        | 27694.4 (693.7)  |
|         | 2                      | 4     | 146.3 (25.5) | 4    | 141.2 (17.6) | 3       | 89.3 (17.1)     | 2      | 15.4 (1.2)    | 5     | 605.1 (127.1)  | <b>1</b>   | <b>9.2 (0.2)</b>    | 8                | 72952.0 (698.3)  | 7                      | 68585.6 (390.1) | 6                        | 54200.9 (1000.9) |
|         | 3                      | 2     | 193.0 (12.6) | 3    | 328.6 (18.4) | 4       | 796.3 (406.4)   | 5      | 995.8 (70.3)  | 4     | 654.4 (35.4)   | <b>1</b>   | <b>155.0 (25.4)</b> | 7                | 53747.5 (867.6)  | 8                      | 59405.0 (372.2) | 6                        | 38563.6 (1046.5) |
| $S_4$   | 1                      | 2     | 27.5 (1.2)   | 5    | 335.4 (29.1) | 3       | 184.8 (24.9)    | 4      | 248.3 (8.4)   | 6     | 2869.7 (199.1) | <b>1</b>   | <b>11.9 (0.1)</b>   | 9                | 35839.6 (443.7)  | 7                      | 10962.8 (255.2) | 8                        | 28408.2 (512.9)  |
|         | 2                      | 4     | 149.5 (13.0) | 4    | 159.0 (19.0) | 3       | 99.1 (19.6)     | 2      | 17.2 (1.1)    | 5     | 547.8 (98.6)   | <b>1</b>   | <b>8.8 (0.2)</b>    | 8                | 72643.4 (669.9)  | 7                      | 68725.5 (636.5) | 6                        | 55844.9 (1020.5) |
|         | 3                      | 2     | 173.4 (9.7)  | 3    | 315.4 (10.2) | 4       | 660.6 (322.1)   | 4      | 907.2 (59.3)  | 4     | 700.2 (47.0)   | <b>1</b>   | <b>126.9 (9.6)</b>  | 6                | 54237.4 (763.5)  | 7                      | 58882.2 (570.3) | 5                        | 40936.3 (1020.4) |
| $S_5$   | 1                      | 2     | 25.7 (0.9)   | 5    | 357.6 (19.4) | 3       | 158.4 (31.2)    | 4      | 268.4 (12.3)  | 6     | 2617.0 (174.9) | <b>1</b>   | <b>11.3 (0.1)</b>   | 9                | 36118.0 (494.1)  | 7                      | 10980.9 (346.4) | 8                        | 27074.7 (722.8)  |
|         | 2                      | 5     | 153.5 (14.8) | 4    | 133.9 (10.3) | 3       | 71.6 (11.9)     | 2      | 17.3 (1.2)    | 6     | 468.0 (92.4)   | <b>1</b>   | <b>8.5 (0.2)</b>    | 9                | 72420.5 (621.0)  | 8                      | 68200.5 (832.6) | 7                        | 54098.8 (1213.8) |
|         | 3                      | 2     | 161.2 (10.1) | 3    | 391.0 (22.7) | 4       | 634.7 (305.4)   | 4      | 736.8 (39.6)  | 4     | 715.4 (53.5)   | <b>1</b>   | <b>105.1 (6.8)</b>  | 6                | 53315.6 (645.5)  | 7                      | 58671.6 (804.6) | 5                        | 39932.5 (780.3)  |
| Average | $r$                    | 2.7   |              | 3.7  |              | 3.4     |                 | 3.4    |               | 4.9   |                | <b>1.0</b> |                     | 7.7              |                  | 7.1                    |                 | 6.4                      |                  |

**Table 7: The Scott-Knott rank ( $r$ ), mean MRE, and standard error (SEM) of all target-tasks and training sizes for IMAGEMAGICK.**

| Size        | $\mathcal{T}_{target}$ | SeMPL |                  | MAML |                  | MetaSGD |                  | Beetle |                  | tEAMS |            | MORF |                  | RF+ <sub>e</sub> |            | DeepPerf+ <sub>e</sub> |                  | SPLConquer+ <sub>e</sub> |            |
|-------------|------------------------|-------|------------------|------|------------------|---------|------------------|--------|------------------|-------|------------|------|------------------|------------------|------------|------------------------|------------------|--------------------------|------------|
|             |                        | $r$   | MRE (SEM)        | $r$  | MRE (SEM)        | $r$     | MRE (SEM)        | $r$    | MRE (SEM)        | $r$   | MRE (SEM)  | $r$  | MRE (SEM)        | $r$              | MRE (SEM)  | $r$                    | MRE (SEM)        | $r$                      | MRE (SEM)  |
| $S_1$       | 1                      | 1     | <b>5.3 (0.3)</b> | 4    | 11.2 (1.1)       | 3       | 9.6 (0.7)        | 2      | 6.8 (0.5)        | 3     | 9.3 (0.6)  | 6    | 17.5 (1.1)       | 6                | 16.7 (1.4) | 5                      | 14.0 (0.0)       | 7                        | 32.6 (0.9) |
|             | 2                      | 2     | 6.0 (0.2)        | 5    | 11.2 (1.1)       | 4       | 9.6 (0.9)        | 3      | 7.6 (0.6)        | 5     | 10.5 (0.8) | 6    | 19.9 (1.3)       | 5                | 11.3 (1.3) | 1                      | <b>4.7 (0.0)</b> | 7                        | 28.0 (0.9) |
|             | 3                      | 2     | 6.9 (0.7)        | 5    | 11.9 (1.1)       | 4       | 10.2 (0.8)       | 1      | <b>5.8 (0.3)</b> | 3     | 9.2 (0.5)  | 8    | 17.9 (1.1)       | 7                | 16.3 (1.4) | 6                      | 13.8 (0.0)       | 9                        | 27.4 (1.0) |
|             | 4                      | 3     | 7.3 (0.6)        | 5    | 11.5 (1.0)       | 4       | 9.5 (0.9)        | 2      | 6.6 (0.4)        | 5     | 10.7 (1.0) | 6    | 16.8 (1.1)       | 5                | 11.3 (1.4) | 1                      | <b>3.8 (0.0)</b> | 7                        | 27.8 (0.9) |
| $S_2$       | 1                      | 1     | <b>4.5 (0.1)</b> | 3    | 5.6 (0.3)        | 4       | 6.0 (0.2)        | 2      | 4.8 (0.1)        | 5     | 8.7 (0.8)  | 4    | 6.0 (0.3)        | 6                | 12.2 (0.2) | 7                      | 14.0 (0.1)       | 8                        | 30.6 (0.9) |
|             | 2                      | 2     | 5.6 (0.2)        | 4    | 6.2 (0.3)        | 3       | 5.8 (0.2)        | 3      | 5.9 (0.2)        | 6     | 10.0 (0.9) | 4    | 6.2 (0.3)        | 5                | 6.8 (0.1)  | 1                      | <b>4.6 (0.0)</b> | 7                        | 25.9 (0.8) |
|             | 3                      | 2     | 5.4 (0.3)        | 3    | 6.3 (0.3)        | 3       | 6.4 (0.2)        | 1      | <b>5.0 (0.2)</b> | 4     | 9.7 (1.0)  | 3    | 6.5 (0.3)        | 5                | 12.1 (0.3) | 6                      | 13.7 (0.1)       | 7                        | 25.8 (0.9) |
|             | 4                      | 4     | 5.7 (0.3)        | 3    | 5.4 (0.2)        | 3       | 5.5 (0.2)        | 2      | 5.2 (0.2)        | 5     | 7.0 (0.5)  | 4    | 5.9 (0.3)        | 4                | 5.9 (0.2)  | 1                      | <b>3.7 (0.0)</b> | 6                        | 25.4 (0.8) |
| $S_3$       | 1                      | 1     | <b>4.2 (0.1)</b> | 2    | 4.5 (0.1)        | 2       | 4.5 (0.1)        | 2      | 4.4 (0.2)        | 3     | 7.1 (0.7)  | 1    | <b>4.3 (0.1)</b> | 4                | 11.4 (0.2) | 5                      | 13.7 (0.1)       | 6                        | 30.3 (0.7) |
|             | 2                      | 2     | 5.0 (0.2)        | 2    | 5.0 (0.1)        | 2       | 4.9 (0.1)        | 3      | 5.2 (0.1)        | 5     | 8.1 (0.7)  | 1    | <b>4.6 (0.1)</b> | 4                | 5.6 (0.1)  | 1                      | <b>4.6 (0.1)</b> | 6                        | 25.4 (0.6) |
|             | 3                      | 1     | <b>4.2 (0.1)</b> | 2    | 4.5 (0.1)        | 2       | 4.6 (0.2)        | 2      | 4.4 (0.1)        | 4     | 7.8 (0.7)  | 3    | 4.8 (0.2)        | 5                | 11.2 (0.1) | 6                      | 13.5 (0.1)       | 7                        | 25.2 (0.7) |
|             | 4                      | 3     | 4.4 (0.2)        | 2    | 4.2 (0.1)        | 2       | 4.3 (0.1)        | 3      | 4.5 (0.1)        | 5     | 8.1 (0.7)  | 3    | 4.5 (0.1)        | 4                | 4.6 (0.1)  | 1                      | <b>3.8 (0.1)</b> | 6                        | 24.4 (0.5) |
| $S_4$       | 1                      | 1     | <b>3.7 (0.1)</b> | 2    | 3.8 (0.1)        | 2       | 3.9 (0.2)        | 3      | 4.1 (0.1)        | 4     | 7.6 (0.8)  | 1    | <b>3.7 (0.1)</b> | 5                | 11.6 (0.1) | 6                      | 13.6 (0.1)       | 7                        | 29.7 (0.8) |
|             | 2                      | 2     | 4.4 (0.1)        | 2    | 4.4 (0.1)        | 2       | 4.4 (0.1)        | 3      | 4.9 (0.1)        | 4     | 10.1 (1.0) | 1    | <b>3.9 (0.1)</b> | 3                | 5.0 (0.2)  | 2                      | 4.4 (0.1)        | 5                        | 24.8 (0.7) |
|             | 3                      | 1     | <b>3.8 (0.1)</b> | 1    | <b>3.8 (0.1)</b> | 1       | <b>3.6 (0.1)</b> | 2      | 4.0 (0.1)        | 4     | 8.8 (0.9)  | 3    | 4.2 (0.1)        | 5                | 11.0 (0.2) | 6                      | 13.2 (0.1)       | 7                        | 24.9 (0.8) |
|             | 4                      | 2     | 3.9 (0.2)        | 2    | 3.9 (0.2)        | 2       | 4.0 (0.1)        | 3      | 4.1 (0.1)        | 4     | 7.6 (0.8)  | 3    | 4.0 (0.1)        | 3                | 4.1 (0.1)  | 1                      | <b>3.6 (0.1)</b> | 5                        | 24.5 (0.7) |
| $S_5$       | 1                      | 2     | 3.7 (0.1)        | 3    | 3.9 (0.1)        | 2       | 3.7 (0.1)        | 4      | 4.2 (0.2)        | 5     | 7.8 (0.6)  | 1    | <b>3.5 (0.1)</b> | 6                | 11.5 (0.1) | 7                      | 13.5 (0.2)       | 8                        | 29.7 (0.8) |
|             | 2                      | 2     | 4.3 (0.1)        | 3    | 4.5 (0.2)        | 2       | 4.4 (0.2)        | 3      | 4.5 (0.1)        | 5     | 7.9 (1.0)  | 1    | <b>3.8 (0.1)</b> | 4                | 4.9 (0.1)  | 3                      | 4.4 (0.1)        | 6                        | 24.7 (0.8) |
|             | 3                      | 2     | 3.8 (0.1)        | 1    | <b>3.7 (0.1)</b> | 1       | <b>3.7 (0.1)</b> | 3      | 3.9 (0.1)        | 5     | 9.2 (1.2)  | 4    | 4.0 (0.1)        | 6                | 11.0 (0.2) | 7                      | 13.1 (0.1)       | 8                        | 25.3 (0.8) |
|             | 4                      | 2     | 3.9 (0.2)        | 2    | 4.0 (0.2)        | 2       | 3.9 (0.1)        | 3      | 4.2 (0.2)        | 4     | 8.3 (0.9)  | 2    | 4.0 (0.2)        | 2                | 4.0 (0.1)  | 1                      | <b>3.7 (0.1)</b> | 5                        | 24.6 (0.8) |
| Average $r$ |                        | 1.9   |                  | 2.8  |                  | 2.5     |                  | 2.5    |                  | 4.4   |            | 3.2  |                  | 4.7              |            | 3.7                    |                  | 6.7                      |            |

**Table 8: The Scott-Knott rank ( $r$ ), mean MRE, and standard error (SEM) of all target-tasks and training sizes for EXASTENCILS.**

| Size        | $\mathcal{T}_{target}$ | SeMPL |                  | MAML |            | MetaSGD |            | Beetle |            | tEAMS |                  | MORF |           | RF+ <sub>e</sub> |           | DeepPerf+ <sub>e</sub> |            | SPLConquer+ <sub>e</sub> |            |
|-------------|------------------------|-------|------------------|------|------------|---------|------------|--------|------------|-------|------------------|------|-----------|------------------|-----------|------------------------|------------|--------------------------|------------|
|             |                        | $r$   | MRE (SEM)        | $r$  | MRE (SEM)  | $r$     | MRE (SEM)  | $r$    | MRE (SEM)  | $r$   | MRE (SEM)        | $r$  | MRE (SEM) | $r$              | MRE (SEM) | $r$                    | MRE (SEM)  | $r$                      | MRE (SEM)  |
| $S_1$       | 1                      | 1     | <b>3.1 (0.0)</b> | 8    | 18.9 (0.1) | 6       | 14.8 (0.7) | 5      | 13.4 (0.6) | 2     | 6.0 (0.2)        | 4    | 8.4 (0.2) | 3                | 8.1 (0.3) | 6                      | 15.4 (0.6) | 7                        | 17.0 (0.2) |
|             | 2                      | 2     | 4.3 (0.5)        | 8    | 19.8 (0.2) | 5       | 14.6 (0.5) | 7      | 17.3 (0.7) | 1     | <b>3.5 (0.4)</b> | 4    | 9.1 (0.2) | 3                | 8.8 (0.3) | 6                      | 15.8 (0.6) | 7                        | 17.3 (0.2) |
|             | 3                      | 2     | 4.4 (0.4)        | 8    | 20.7 (0.2) | 6       | 16.8 (0.8) | 5      | 15.6 (0.6) | 1     | <b>3.6 (0.4)</b> | 4    | 9.4 (0.3) | 3                | 8.9 (0.3) | 7                      | 18.9 (0.9) | 7                        | 18.3 (0.2) |
|             | 4                      | 1     | <b>3.4 (0.3)</b> | 7    | 21.7 (0.2) | 4       | 16.7 (0.7) | 4      | 17.4 (0.7) | 1     | <b>3.4 (0.4)</b> | 3    | 9.8 (0.3) | 2                | 9.0 (0.3) | 6                      | 19.5 (1.0) | 5                        | 18.2 (0.2) |
| $S_2$       | 1                      | 1     | <b>2.7 (0.0)</b> | 8    | 18.7 (0.2) | 4       | 8.9 (0.6)  | 5      | 9.7 (0.5)  | 2     | 5.4 (0.3)        | 3    | 6.1 (0.1) | 3                | 6.2 (0.1) | 6                      | 15.7 (0.7) | 7                        | 16.7 (0.1) |
|             | 2                      | 1     | <b>2.9 (0.2)</b> | 7    | 19.4 (0.2) | 4       | 8.7 (0.4)  | 5      | 11.8 (0.6) | 2     | 3.3 (0.4)        | 3    | 6.6 (0.1) | 3                | 6.7 (0.1) | 6                      | 16.7 (0.8) | 6                        | 17.0 (0.1) |
|             | 3                      | 1     | <b>3.0 (0.1)</b> | 6    | 20.3 (0.2) | 3       | 10.4 (0.7) | 4      | 12.2 (0.6) | 1     | <b>2.8 (0.4)</b> | 2    | 6.8 (0.2) | 2                | 6.7 (0.2) | 6                      | 19.6 (1.0) | 5                        | 18.0 (0.1) |
|             | 4                      | 1     | <b>2.5 (0.1)</b> | 7    | 21.3 (0.2) | 3       | 10.5 (0.7) | 4      | 13.7 (0.7) | 1     | <b>2.5 (0.3)</b> | 2    | 6.9 (0.2) | 2                | 6.8 (0.2) | 6                      | 18.6 (0.7) | 5                        | 17.9 (0.1) |
| $S_3$       | 1                      | 1     | <b>2.3 (0.0)</b> | 7    | 18.2 (0.1) | 5       | 5.0 (0.4)  | 5      | 5.3 (0.3)  | 2     | 3.7 (0.2)        | 3    | 4.1 (0.1) | 4                | 4.7 (0.1) | 6                      | 16.3 (0.9) | 6                        | 16.6 (0.1) |
|             | 2                      | 1     | <b>2.3 (0.0)</b> | 8    | 19.0 (0.1) | 3       | 4.8 (0.2)  | 5      | 6.7 (0.4)  | 1     | <b>2.4 (0.2)</b> | 2    | 4.5 (0.1) | 4                | 5.0 (0.1) | 6                      | 16.0 (0.6) | 7                        | 16.8 (0.1) |
|             | 3                      | 2     | 2.3 (0.0)        | 9    | 19.9 (0.1) | 5       | 5.9 (0.5)  | 6      | 6.9 (0.3)  | 1     | <b>2.0 (0.2)</b> | 3    | 4.4 (0.1) | 4                | 5.0 (0.1) | 8                      | 18.7 (0.9) | 7                        | 17.9 (0.1) |
|             | 4                      | 1     | <b>1.9 (0.0)</b> | 9    | 20.9 (0.1) | 5       | 6.1 (0.6)  | 6      | 6.8 (0.4)  | 2     | 2.3 (0.3)        | 3    | 4.5 (0.1) | 4                | 5.1 (0.1) | 8                      | 19.3 (0.7) | 7                        | 17.7 (0.1) |
| $S_4$       | 1                      | 1     | <b>2.0 (0.0)</b> | 6    | 18.1 (0.1) | 3       | 3.8 (0.3)  | 3      | 3.7 (0.1)  | 3     | 3.7 (0.3)        | 2    | 3.5 (0.0) | 4                | 4.2 (0.0) | 5                      | 16.1 (0.6) | 5                        | 16.5 (0.1) |
|             | 2                      | 1     | <b>2.0 (0.0)</b> | 8    | 18.9 (0.1) | 3       | 3.6 (0.1)  | 5      | 4.4 (0.3)  | 2     | 2.5 (0.3)        | 4    | 3.8 (0.0) | 5                | 4.5 (0.0) | 6                      | 16.2 (0.5) | 7                        | 16.7 (0.1) |
|             | 3                      | 1     | <b>2.0 (0.0)</b> | 8    | 19.7 (0.1) | 5       | 4.8 (0.4)  | 6      | 5.4 (0.3)  | 2     | 2.5 (0.3)        | 3    | 3.7 (0.0) | 4                | 4.4 (0.1) | 7                      | 17.9 (0.6) | 7                        | 17.8 (0.1) |
|             | 4                      | 1     | <b>1.4 (0.0)</b> | 8    | 20.7 (0.1) | 3       | 3.8 (0.2)  | 5      | 5.0 (0.3)  | 2     | 1.8 (0.1)        | 3    | 3.7 (0.0) | 4                | 4.5 (0.0) | 7                      | 18.5 (0.6) | 6                        | 17.7 (0.1) |
| $S_5$       | 1                      | 1     | <b>1.8 (0.0)</b> | 9    | 18.0 (0.1) | 2       | 2.7 (0.0)  | 4      | 3.1 (0.1)  | 5     | 3.5 (0.2)        | 3    | 2.9 (0.0) | 6                | 3.7 (0.0) | 7                      | 15.5 (0.4) | 8                        | 16.4 (0.1) |
|             | 2                      | 1     | <b>1.4 (0.0)</b> | 8    | 18.8 (0.1) | 3       | 3.1 (0.1)  | 4      | 3.4 (0.2)  | 2     | 2.7 (0.3)        | 3    | 3.1 (0.0) | 5                | 3.9 (0.0) | 6                      | 15.0 (0.2) | 7                        | 16.7 (0.1) |
|             | 3                      | 1     | <b>1.1 (0.1)</b> | 7    | 19.6 (0.1) | 4       | 4.2 (0.3)  | 3      | 3.8 (0.1)  | 2     | 2.7 (0.3)        | 2    | 2.9 (0.0) | 3                | 3.8 (0.0) | 5                      | 16.7 (0.5) | 6                        | 17.8 (0.1) |
|             | 4                      | 1     | <b>1.4 (0.0)</b> | 7    | 20.6 (0.1) | 4       | 3.9 (0.3)  | 4      | 3.8 (0.1)  | 2     | 1.9 (0.2)        | 3    | 2.9 (0.0) | 5                | 4.0 (0.0) | 6                      | 17.4 (0.3) | 6                        | 17.6 (0.1) |
| Average $r$ |                        | 1.1   |                  | 7.7  |            | 4       |            | 4.8    |            | 1.9   |                  | 3    |           | 3.6              |           | 6.3                    |            | 6.4                      |            |

**Table 9: The Scott-Knott rank ( $r$ ), mean MRE, and standard error (SEM) of all target-tasks and training sizes for x264.**

| Size        | $\mathcal{T}_{target}$ | SeMPL      |                   | MAML |            | MetaSGD |            | Beetle   |                   | tEAMS    |                   | MORF     |                   | RF+ <sub>e</sub> |                   | DeepPerf+ <sub>e</sub> |                   | SPLConquer+ <sub>e</sub> |             |
|-------------|------------------------|------------|-------------------|------|------------|---------|------------|----------|-------------------|----------|-------------------|----------|-------------------|------------------|-------------------|------------------------|-------------------|--------------------------|-------------|
|             |                        | $r$        | MRE (SEM)         | $r$  | MRE (SEM)  | $r$     | MRE (SEM)  | $r$      | MRE (SEM)         | $r$      | MRE (SEM)         | $r$      | MRE (SEM)         | $r$              | MRE (SEM)         | $r$                    | MRE (SEM)         | $r$                      | MRE (SEM)   |
| $S_1$       | 1                      | 2          | 26.5 (0.8)        | 4    | 42.3 (2.5) | 4       | 42.8 (2.6) | <b>1</b> | <b>25.7 (0.6)</b> | 3        | 37.1 (2.3)        | 5        | 60.6 (3.3)        | 6                | 82.0 (2.4)        | 7                      | 85.5 (0.5)        | 8                        | 133.4 (4.9) |
|             | 2                      | 2          | 16.3 (0.8)        | 6    | 37.4 (2.3) | 7       | 40.4 (2.6) | 4        | 19.6 (0.6)        | 5        | 24.9 (1.6)        | 8        | 53.6 (2.8)        | 3                | 18.4 (0.6)        | <b>1</b>               | <b>10.7 (0.1)</b> | 9                        | 64.7 (2.9)  |
|             | 3                      | 2          | 19.3 (0.9)        | 6    | 37.6 (2.6) | 6       | 39.3 (2.7) | 3        | 20.9 (0.6)        | 5        | 31.0 (3.0)        | 7        | 54.4 (2.8)        | 4                | 24.1 (0.9)        | <b>1</b>               | <b>15.6 (0.1)</b> | 8                        | 77.7 (3.3)  |
|             | 4                      | 2          | 25.1 (1.4)        | 4    | 38.4 (2.5) | 5       | 42.2 (3.0) | 2        | 25.3 (1.0)        | 3        | 26.0 (2.6)        | 6        | 53.7 (3.1)        | <b>1</b>         | <b>24.4 (0.4)</b> | 3                      | 27.2 (0.0)        | 6                        | 53.2 (1.8)  |
|             | 5                      | 3          | 17.6 (0.9)        | 5    | 31.5 (1.6) | 5       | 33.8 (2.5) | 2        | 16.8 (0.5)        | 4        | 22.9 (1.5)        | 6        | 42.1 (2.2)        | 2                | 16.4 (0.6)        | <b>1</b>               | <b>11.6 (0.0)</b> | 7                        | 56.9 (2.3)  |
|             | 6                      | <b>1</b>   | <b>15.3 (1.2)</b> | 3    | 29.5 (1.4) | 3       | 30.2 (1.7) | <b>1</b> | <b>15.6 (0.5)</b> | 2        | 23.3 (1.7)        | 6        | 41.7 (2.0)        | 5                | 36.9 (1.2)        | 4                      | 31.3 (0.1)        | 7                        | 89.7 (3.7)  |
|             | 7                      | 3          | 19.6 (1.3)        | 4    | 27.7 (1.4) | 4       | 27.8 (1.5) | 2        | 18.4 (1.2)        | 3        | 19.3 (0.9)        | 5        | 38.4 (2.0)        | 2                | 18.4 (0.5)        | <b>1</b>               | <b>12.7 (0.0)</b> | 6                        | 61.0 (2.6)  |
|             | 8                      | 2          | 11.2 (0.5)        | 4    | 15.7 (0.6) | 3       | 13.3 (0.7) | <b>1</b> | <b>10.2 (0.4)</b> | 5        | 17.2 (1.2)        | 5        | 16.7 (0.9)        | 6                | 22.2 (0.5)        | 7                      | 24.3 (0.1)        | 8                        | 56.7 (2.1)  |
|             | 9                      | <b>1</b>   | <b>19.3 (1.1)</b> | 6    | 35.4 (2.5) | 6       | 35.9 (2.3) | 3        | 22.9 (0.8)        | 5        | 26.7 (2.9)        | 7        | 51.7 (2.6)        | 2                | 22.0 (0.5)        | 4                      | 24.2 (0.1)        | 8                        | 56.0 (2.2)  |
|             | 10                     | <b>1</b>   | <b>14.4 (1.1)</b> | 4    | 34.3 (1.9) | 4       | 34.5 (2.3) | 2        | 16.8 (0.5)        | 3        | 23.6 (1.7)        | 5        | 47.0 (2.4)        | 6                | 192.1 (2.0)       | 7                      | 200.0 (0.5)       | 8                        | 257.4 (8.5) |
| $S_2$       | 1                      | <b>1</b>   | <b>21.5 (0.4)</b> | 3    | 27.7 (0.7) | 3       | 27.2 (1.0) | 2        | 22.3 (0.6)        | 4        | 34.4 (3.2)        | 5        | 46.1 (1.7)        | 6                | 78.8 (1.4)        | 7                      | 83.8 (0.9)        | 8                        | 129.4 (2.9) |
|             | 2                      | 2          | 14.2 (0.5)        | 6    | 23.6 (0.7) | 5       | 21.7 (1.0) | 4        | 16.5 (0.4)        | 7        | 25.9 (2.9)        | 8        | 38.7 (1.9)        | 3                | 15.2 (0.5)        | <b>1</b>               | <b>10.5 (0.1)</b> | 9                        | 58.6 (2.0)  |
|             | 3                      | <b>1</b>   | <b>15.7 (0.6)</b> | 5    | 25.5 (0.8) | 5       | 24.8 (1.4) | 2        | 17.7 (0.6)        | 4        | 23.1 (1.6)        | 6        | 39.7 (2.0)        | 3                | 19.7 (0.9)        | <b>1</b>               | <b>15.6 (0.1)</b> | 7                        | 71.1 (2.4)  |
|             | 4                      | <b>1</b>   | <b>19.0 (0.7)</b> | 4    | 25.6 (0.9) | 4       | 25.4 (0.9) | 2        | 21.1 (0.7)        | 2        | 22.0 (1.7)        | 6        | 35.4 (2.2)        | 3                | 24.6 (0.4)        | 5                      | 27.0 (0.1)        | 7                        | 51.4 (1.6)  |
|             | 5                      | 2          | 13.4 (0.4)        | 6    | 21.8 (0.6) | 5       | 20.8 (1.1) | 3        | 14.4 (0.3)        | 4        | 18.4 (1.3)        | 7        | 34.3 (1.9)        | 3                | 14.3 (0.5)        | <b>1</b>               | <b>11.6 (0.0)</b> | 8                        | 53.7 (1.7)  |
|             | 6                      | <b>1</b>   | <b>10.5 (0.2)</b> | 3    | 19.9 (0.5) | 3       | 19.9 (0.9) | 2        | 13.5 (0.4)        | 3        | 19.0 (1.1)        | 4        | 30.5 (1.6)        | 5                | 33.5 (1.0)        | 4                      | 31.2 (0.2)        | 6                        | 84.0 (2.4)  |
|             | 7                      | 2          | 13.2 (0.3)        | 4    | 18.5 (0.5) | 4       | 18.0 (0.7) | 2        | 13.4 (0.4)        | 5        | 21.1 (2.1)        | 6        | 25.4 (1.2)        | 3                | 16.0 (0.4)        | <b>1</b>               | <b>12.6 (0.1)</b> | 7                        | 55.6 (2.0)  |
|             | 8                      | 2          | 8.8 (0.3)         | 4    | 10.9 (0.3) | 3       | 9.6 (0.3)  | <b>1</b> | <b>8.4 (0.2)</b>  | 6        | 15.6 (1.3)        | 5        | 12.2 (0.5)        | 7                | 21.9 (0.7)        | 8                      | 23.9 (0.1)        | 9                        | 53.8 (1.7)  |
|             | 9                      | <b>1</b>   | <b>13.4 (0.4)</b> | 4    | 22.4 (0.6) | 3       | 21.9 (0.9) | 2        | 19.3 (0.6)        | 5        | 22.8 (1.9)        | 6        | 34.8 (1.8)        | 3                | 21.7 (0.6)        | 5                      | 23.8 (0.1)        | 7                        | 53.1 (1.7)  |
|             | 10                     | <b>1</b>   | <b>11.4 (0.3)</b> | 3    | 23.3 (0.8) | 3       | 23.0 (1.4) | 2        | 14.8 (0.5)        | 3        | 22.6 (1.8)        | 4        | 34.6 (2.1)        | 5                | 188.0 (2.8)       | 6                      | 198.5 (0.6)       | 7                        | 241.3 (7.5) |
| $S_3$       | 1                      | 2          | 21.1 (0.5)        | 4    | 24.7 (0.7) | 3       | 22.6 (0.5) | <b>1</b> | <b>20.4 (0.4)</b> | 5        | 26.9 (1.7)        | 6        | 34.5 (1.7)        | 7                | 77.4 (1.5)        | 8                      | 83.3 (1.3)        | 9                        | 122.7 (2.2) |
|             | 2                      | 2          | 13.2 (0.4)        | 5    | 20.6 (0.6) | 5       | 20.9 (1.0) | 4        | 15.4 (0.4)        | 5        | 21.5 (1.1)        | 6        | 27.7 (1.7)        | 3                | 13.8 (0.3)        | <b>1</b>               | <b>10.4 (0.2)</b> | 7                        | 53.2 (1.7)  |
|             | 3                      | <b>1</b>   | <b>13.7 (0.2)</b> | 5    | 22.3 (0.6) | 5       | 22.4 (0.9) | 3        | 16.6 (0.5)        | 5        | 21.8 (1.1)        | 6        | 28.5 (1.6)        | 4                | 17.7 (0.4)        | 2                      | 15.2 (0.1)        | 7                        | 64.0 (1.7)  |
|             | 4                      | <b>1</b>   | <b>17.9 (0.6)</b> | 3    | 23.3 (0.8) | 4       | 24.3 (2.5) | 2        | 19.1 (0.4)        | 2        | 18.9 (1.4)        | 4        | 24.9 (1.5)        | 4                | 24.3 (0.2)        | 5                      | 26.7 (0.1)        | 6                        | 49.8 (1.4)  |
|             | 5                      | 2          | 12.4 (0.4)        | 6    | 19.7 (0.7) | 5       | 18.2 (0.8) | 3        | 13.4 (0.3)        | 4        | 17.1 (1.1)        | 7        | 24.6 (1.6)        | 3                | 13.5 (0.2)        | <b>1</b>               | <b>11.5 (0.1)</b> | 8                        | 49.2 (1.5)  |
|             | 6                      | <b>1</b>   | <b>10.2 (0.3)</b> | 3    | 17.1 (0.5) | 3       | 17.6 (0.8) | 2        | 12.3 (0.3)        | 4        | 20.6 (1.0)        | 5        | 22.2 (1.4)        | 7                | 31.2 (0.6)        | 6                      | 30.6 (0.3)        | 8                        | 77.3 (1.9)  |
|             | 7                      | 2          | 12.4 (0.3)        | 4    | 16.1 (0.4) | 4       | 15.7 (0.6) | <b>1</b> | <b>12.1 (0.3)</b> | 5        | 18.4 (1.1)        | 5        | 18.5 (0.9)        | 3                | 15.1 (0.2)        | 2                      | 12.4 (0.1)        | 6                        | 52.2 (1.5)  |
|             | 8                      | <b>1</b>   | <b>8.0 (0.2)</b>  | 3    | 9.6 (0.2)  | 2       | 8.7 (0.4)  | <b>1</b> | <b>7.8 (0.2)</b>  | 4        | 14.4 (1.0)        | 3        | 9.8 (0.4)         | 5                | 21.5 (0.2)        | 6                      | 23.7 (0.1)        | 7                        | 50.5 (1.3)  |
|             | 9                      | <b>1</b>   | <b>12.9 (0.4)</b> | 3    | 19.4 (0.6) | 4       | 21.0 (1.2) | 2        | 17.3 (0.4)        | 4        | 21.2 (1.7)        | 6        | 25.0 (1.4)        | 4                | 21.1 (0.2)        | 5                      | 23.6 (0.1)        | 7                        | 50.1 (1.2)  |
|             | 10                     | <b>1</b>   | <b>10.2 (0.3)</b> | 4    | 20.2 (0.6) | 4       | 19.8 (1.0) | 2        | 13.6 (0.4)        | 3        | 18.4 (1.2)        | 5        | 24.4 (1.6)        | 6                | 184.0 (0.8)       | 7                      | 197.7 (1.0)       | 8                        | 221.7 (5.9) |
| $S_4$       | 1                      | 2          | 20.8 (0.5)        | 3    | 24.8 (1.0) | 2       | 21.0 (0.5) | <b>1</b> | <b>19.7 (0.4)</b> | 3        | 23.7 (1.8)        | 4        | 26.7 (1.6)        | 5                | 77.7 (1.9)        | 6                      | 83.4 (1.8)        | 7                        | 114.3 (1.9) |
|             | 2                      | 2          | 13.0 (0.3)        | 5    | 18.9 (0.5) | 4       | 17.8 (0.8) | 3        | 14.6 (0.4)        | 6        | 20.5 (1.1)        | 6        | 21.1 (1.5)        | 2                | 13.3 (0.4)        | <b>1</b>               | <b>10.5 (0.2)</b> | 7                        | 45.6 (1.1)  |
|             | 3                      | <b>1</b>   | <b>12.6 (0.3)</b> | 5    | 19.7 (0.7) | 5       | 19.8 (0.8) | 2        | 14.4 (0.5)        | 6        | 21.0 (1.5)        | 6        | 21.7 (1.5)        | 4                | 17.3 (0.5)        | 3                      | 15.3 (0.2)        | 7                        | 56.1 (1.3)  |
|             | 4                      | <b>1</b>   | <b>16.0 (0.4)</b> | 3    | 21.6 (0.7) | 3       | 21.4 (0.9) | 2        | 17.8 (0.6)        | <b>1</b> | <b>16.7 (1.0)</b> | 2        | 18.6 (1.3)        | 4                | 24.3 (0.3)        | 5                      | 26.4 (0.1)        | 6                        | 42.9 (0.9)  |
|             | 5                      | 2          | 11.7 (0.3)        | 5    | 18.5 (0.6) | 4       | 17.0 (0.8) | 3        | 13.4 (0.3)        | 5        | 19.6 (1.3)        | 5        | 19.7 (1.5)        | 3                | 13.2 (0.2)        | <b>1</b>               | <b>11.2 (0.1)</b> | 6                        | 42.0 (1.0)  |
|             | 6                      | <b>1</b>   | <b>9.8 (0.3)</b>  | 3    | 16.3 (0.5) | 3       | 15.7 (0.6) | 2        | 12.2 (0.4)        | 5        | 20.9 (2.7)        | 4        | 17.2 (1.3)        | 6                | 30.9 (0.8)        | 6                      | 30.4 (0.4)        | 7                        | 67.8 (1.4)  |
|             | 7                      | 2          | 11.6 (0.3)        | 5    | 15.0 (0.4) | 4       | 14.4 (0.6) | <b>1</b> | <b>10.2 (0.2)</b> | 6        | 16.4 (1.3)        | 4        | 14.2 (0.8)        | 4                | 14.6 (0.3)        | 3                      | 12.3 (0.2)        | 7                        | 43.5 (1.1)  |
|             | 8                      | <b>1</b>   | <b>7.3 (0.1)</b>  | 4    | 8.8 (0.2)  | 2       | 7.8 (0.2)  | <b>1</b> | <b>7.5 (0.2)</b>  | 5        | 12.5 (0.8)        | 3        | 8.2 (0.3)         | 6                | 21.3 (0.3)        | 7                      | 23.5 (0.2)        | 8                        | 45.6 (0.7)  |
|             | 9                      | <b>1</b>   | <b>12.1 (0.3)</b> | 3    | 18.5 (0.6) | 3       | 18.7 (0.8) | 2        | 16.6 (0.4)        | 2        | 16.7 (1.1)        | 3        | 18.8 (1.3)        | 4                | 21.2 (0.3)        | 5                      | 23.6 (0.2)        | 6                        | 44.8 (0.8)  |
|             | 10                     | <b>1</b>   | <b>9.5 (0.2)</b>  | 3    | 18.9 (0.6) | 3       | 18.6 (1.1) | 2        | 13.2 (0.4)        | 3        | 19.1 (2.7)        | 3        | 18.7 (1.5)        | 4                | 183.4 (1.1)       | 5                      | 194.6 (1.6)       | 6                        | 212.9 (5.8) |
| $S_5$       | 1                      | 2          | 21.3 (0.7)        | 3    | 23.8 (0.9) | 2       | 21.1 (0.7) | <b>1</b> | <b>19.9 (0.4)</b> | 4        | 42.2 (5.8)        | 3        | 23.3 (1.2)        | 5                | 79.0 (2.0)        | 6                      | 85.4 (2.1)        | 7                        | 114.2 (2.1) |
|             | 2                      | 2          | 12.6 (0.4)        | 6    | 19.3 (0.5) | 6       | 19.3 (1.0) | 4        | 15.1 (0.5)        | 7        | 22.8 (2.4)        | 5        | 17.8 (1.0)        | 3                | 13.3 (0.4)        | <b>1</b>               | <b>10.6 (0.3)</b> | 8                        | 42.8 (1.0)  |
|             | 3                      | <b>1</b>   | <b>12.2 (0.3)</b> | 5    | 20.0 (0.5) | 5       | 19.9 (0.8) | 2        | 15.0 (0.6)        | 6        | 24.5 (3.3)        | 4        | 18.5 (1.0)        | 3                | 16.6 (0.4)        | 2                      | 15.0 (0.2)        | 7                        | 52.9 (1.1)  |
|             | 4                      | <b>1</b>   | <b>15.8 (0.4)</b> | 3    | 20.4 (0.8) | 3       | 20.6 (0.8) | 2        | 17.3 (0.5)        | 3        | 21.4 (2.9)        | <b>1</b> | <b>16.0 (0.7)</b> | 4                | 24.6 (0.3)        | 5                      | 26.3 (0.2)        | 6                        | 41.8 (0.8)  |
|             | 5                      | <b>1</b>   | <b>11.1 (0.3)</b> | 4    | 18.9 (0.6) | 3       | 17.8 (0.8) | 2        | 13.2 (0.6)        | 5        | 21.2 (1.8)        | 3        | 16.9 (0.9)        | 2                | 13.0 (0.2)        | <b>1</b>               | <b>11.2 (0.1)</b> | 6                        | 39.7 (1.0)  |
|             | 6                      | <b>1</b>   | <b>9.8 (0.3)</b>  | 4    | 16.7 (0.7) | 4       | 16.0 (0.7) | 2        | 12.1 (0.4)        | 5        | 18.6 (1.7)        | 3        | 14.6 (0.8)        | 6                | 30.1 (0.8)        | 6                      | 30.1 (0.5)        | 7                        | 66.2 (1.8)  |
|             | 7                      | 2          | 10.9 (0.2)        | 5    | 15.8 (0.4) | 4       | 15.0 (0.5) | <b>1</b> | <b>10.2 (0.3)</b> | 6        | 17.7 (1.1)        | 3        | 12.4 (0.6)        | 4                | 14.8 (0.3)        | 3                      | 12.6 (0.2)        | 7                        | 41.8 (1.3)  |
|             | 8                      | <b>1</b>   | <b>7.1 (0.2)</b>  | 4    | 8.7 (0.2)  | 3       | 8.1 (0.3)  | <b>1</b> | <b>7.2 (0.2)</b>  | 5        | 14.7 (1.1)        | 2        | 7.8 (0.2)         | 6                | 21.6 (0.3)        | 7                      | 23.5 (0.2)        | 8                        | 42.2 (0.8)  |
|             | 9                      | <b>1</b>   | <b>12.1 (0.4)</b> | 3    | 18.3 (0.6) | 4       | 19.4 (0.9) | 2        | 16.3 (0.5)        | 2        | 15.5 (1.0)        | 2        | 15.8 (0.8)        | 5                | 21.5 (0.3)        | 6                      | 23.5 (0.2)        | 7                        | 41.9 (0.8)  |
|             | 10                     | <b>1</b>   | <b>9.2 (0.3)</b>  | 4    | 19.9 (0.7) | 4       | 19.8 (0.8) | 2        | 13.5 (0.4)        | 3        | 16.7 (1.6)        | 3        | 15.7 (0.8)        | 5                | 181.9 (1.3)       | 6                      | 192.6 (1.6)       | 7                        | 208.0 (6.5) |
| Average $r$ |                        | <b>1.5</b> |                   | 4.2  |            | 3.9     |            | 2        |                   | 4.2      |                   | 4.8      |                   | 4.2              |                   | 4.1                    |                   | 7.2                      |             |