

Task	Random	REINFORCE		TNPG		RWR		REPS		TRPO		CEM		CMA-ES		DDPG	
Cart-Pole Balancing	77.1 ± 0.0	4693.7 ±	14.0	<b>3986.4</b> ±	<b>748.9</b>	<b>4861.5</b> ±	<b>12.3</b>	565.6 ±	137.6	<b>4869.8</b> ±	<b>37.6</b>	4815.4 ±	4.8	2440.4 ±	568.3	4634.4 ±	87.8
Inverted Pendulum*	−153.4 ± 0.2	13.4 ±	18.0	<b>209.7</b> ±	<b>55.5</b>	84.7 ±	13.8	−113.3 ±	4.6	<b>247.2</b> ±	<b>76.1</b>	38.2 ±	25.7	−40.1 ±	5.7	40.0 ±	244.6
Mountain Car	−415.4 ± 0.0	−67.1 ±	1.0	<b>-66.5</b> ±	<b>4.5</b>	−79.4 ±	1.1	−275.6 ±	166.3	<b>-61.7</b> ±	<b>0.9</b>	−66.0 ±	2.4	−85.0 ±	7.7	−288.4 ±	170.3
Acrobot	−1904.5 ± 1.0	−508.1 ±	91.0	−395.8 ±	121.2	−352.7 ±	35.9	−1001.5 ±	10.8	−326.0 ±	24.4	−436.8 ±	14.7	−785.6 ±	13.1	<b>-223.6</b> ±	<b>5.8</b>
Double Inverted Pendulum*	149.7 ± 0.1	4116.5 ±	65.2	<b>4455.4</b> ±	<b>37.6</b>	3614.8 ±	368.1	446.7 ±	114.8	<b>4412.4</b> ±	<b>50.4</b>	2566.2 ±	178.9	1576.1 ±	51.3	2863.4 ±	154.0
Swimmer*	−1.7 ± 0.1	92.3 ±	0.1	<b>96.0</b> ±	<b>0.2</b>	60.7 ±	5.5	3.8 ±	3.3	<b>96.0</b> ±	<b>0.2</b>	68.8 ±	2.4	64.9 ±	1.4	85.8 ±	1.8
Hopper	8.4 ± 0.0	714.0 ±	29.3	<b>1155.1</b> ±	<b>57.9</b>	553.2 ±	71.0	86.7 ±	17.6	<b>1183.3</b> ±	<b>150.0</b>	63.1 ±	7.8	20.3 ±	14.3	267.1 ±	43.5
2D Walker	−1.7 ± 0.0	506.5 ±	78.8	<b>1382.6</b> ±	<b>108.2</b>	136.0 ±	15.9	−37.0 ±	38.1	<b>1353.8</b> ±	<b>85.0</b>	84.5 ±	19.2	77.1 ±	24.3	318.4 ±	181.6
Half-Cheetah	−90.8 ± 0.3	1183.1 ±	69.2	<b>1729.5</b> ±	<b>184.6</b>	376.1 ±	28.2	34.5 ±	38.0	<b>1914.0</b> ±	<b>120.1</b>	330.4 ±	274.8	441.3 ±	107.6	<b>2148.6</b> ±	<b>702.7</b>
Ant*	13.4 ± 0.7	548.3 ±	55.5	<b>706.0</b> ±	<b>127.7</b>	37.6 ±	3.1	39.0 ±	9.8	<b>730.2</b> ±	<b>61.3</b>	49.2 ±	5.9	17.8 ±	15.5	326.2 ±	20.8
Simple Humanoid	41.5 ± 0.2	128.1 ±	34.0	<b>255.0</b> ±	<b>24.5</b>	93.3 ±	17.4	28.3 ±	4.7	<b>269.7</b> ±	<b>40.3</b>	60.6 ±	12.9	28.7 ±	3.9	99.4 ±	28.1
Full Humanoid	13.2 ± 0.1	262.2 ±	10.5	<b>288.4</b> ±	<b>25.2</b>	46.7 ±	5.6	41.7 ±	6.1	<b>287.0</b> ±	<b>23.4</b>	36.9 ±	2.9	N/A ±	N/A	119.0 ±	31.2