Supplemental Material

	S-MCTS	S-MCTS-H	S-MCTS-H-R	MCTS	MCTS-R
Iterations	{500, 1000, 5000, 10000}				
H	{100, 200, 400, 800} (Gridworld) or 150 (Tetris)				
c	{0.01, 0.1, 0.25, 0.5, 0.75, 1.0, 1.5, 2.0, 3.0, 4.0, 8.0} (Gridworld) or				
	{0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.8, 1.0, 1.5, 2.0, 3.0, 4.0, 5.0, 8.0, 1.0, 20.0} (Tetris)				
Trees per Threads	2 (Gridworld) or 8 (Tetris)				
Number of Threads	4				
Reuse Tree	No	No	Yes	No	Yes
Control Mode	Polling	Hierarchical	Hierarchical	-	-

Table 1: Parameter settings for each MCTS algorithm.