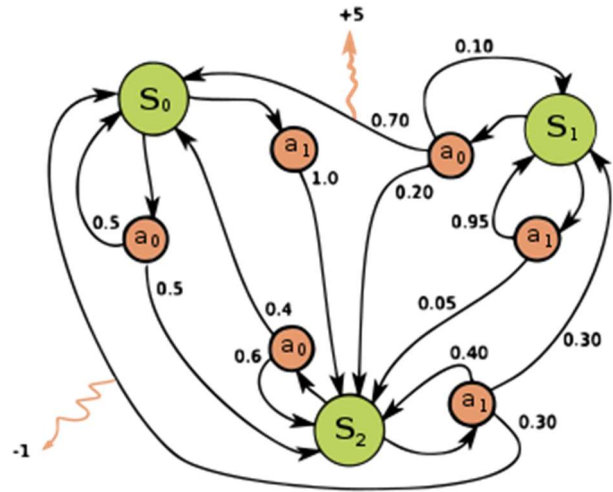


Markov Decision Process Representations

Consider the MDP shown in the state-transition diagram below.



Complete the tabular (matrix) representations of the $T(s, a, s')$ and $R(s, a, s')$.

	T				R		
	S_0	S_1	S_2		S_0	S_1	S_2
S_0, a_0	0.5	0.0	0.5		0.0	0.0	0.0
S_0, a_1	0.0	0.0	1.0		0.0	0.0	0.0
S_1, a_0	0.7	0.1	0.2		5.0	0.0	0.0
S_1, a_1	0.0	0.95	0.05		0.0	0.0	0.0
S_2, a_0	0.4	0.0	0.6		0.0	0.0	0.0
S_2, a_1	0.3	0.3	0.4		-1.0	0.0	0.0

Next, take a different MDP, represented below in matrix form, and draw its state-transition diagram.

	T			R	
	S_0	S_1		S_0	S_1
S_0, a_0	0.8	0.2		2	2
S_0, a_1	0.5	0.5		5	4
S_1, a_0	0.5	0.5		2	2
S_1, a_1	0.2	0.8		4	-10

