

APPENDIX - SUPPLEMENTARY EXPERIMENT RESULTS

APPENDIX A

MAB REINFORCEMENT LEARNING RESULTS FOR ALL θ FOR “NO PRESENCE” MODELS

θ	ARM	Test	ACC	F1	TPR	TNR	PREC	NIR
0.1	0	1	0.941	0.941	1.000	0.889	0.889	0.529
0.3	0	1	0.941	0.941	1.000	0.889	0.889	0.529
0.5	0	1	0.941	0.941	1.000	0.889	0.889	0.529
0.7	0	1	0.912	0.909	1.000	0.842	0.833	0.529
0.9	0	1	0.912	0.909	1.000	0.842	0.833	0.529
0.1	2	2	0.956	0.944	1.000	0.929	0.895	0.578
0.3	3	2	0.933	0.927	0.864	1.000	1.000	0.578
0.5	3	2	0.911	0.900	0.857	0.958	0.947	0.578
0.7	2	2	0.867	0.813	1.000	0.813	0.684	0.578
0.9	0	2	0.578	N/A	N/A	N/A	N/A	0.578
0.1	3	3	0.921	0.914	1.000	0.864	0.842	0.500
0.3	3	3	0.895	0.882	1.000	0.826	0.789	0.500
0.5	3	3	0.895	0.882	1.000	0.826	0.789	0.500
0.7	3	3	0.500	N/A	N/A	N/A	N/A	0.500
0.9	3	3	0.500	N/A	N/A	N/A	N/A	0.500
0.1	4	4	0.949	0.941	1.000	0.913	0.889	0.538
0.3	2	4	0.923	0.909	1.000	0.875	0.833	0.538
0.5	2	4	0.923	0.909	1.000	0.875	0.833	0.538
0.7	4	4	0.923	0.909	1.000	0.875	0.833	0.538
0.9	2	4	0.923	0.909	1.000	0.875	0.833	0.538
0.1	0	5	0.905	0.875	0.933	0.889	0.824	0.595
0.3	1	5	0.929	0.909	0.938	0.923	0.882	0.595
0.5	1	5	0.929	0.909	0.938	0.923	0.882	0.595
0.7	2	5	0.881	0.828	1.000	0.833	0.706	0.595
0.9	1	5	0.881	0.828	1.000	0.833	0.706	0.595
0.1	2	6	0.795	0.733	1.000	0.714	0.579	0.513
0.3	2	6	0.513	N/A	N/A	N/A	N/A	0.513
0.5	2	6	0.513	N/A	N/A	N/A	N/A	0.513
0.7	2	6	0.513	N/A	N/A	N/A	N/A	0.513
0.9	0	6	0.513	N/A	N/A	N/A	N/A	0.513
0.1	0	7	0.846	0.733	1.000	0.805	0.579	0.635
0.3	0	7	0.731	0.417	1.000	0.702	0.263	0.635
0.5	0	7	0.673	0.190	1.000	0.660	0.105	0.635
0.7	0	7	0.635	N/A	N/A	N/A	N/A	0.635
0.9	0	7	0.635	N/A	N/A	N/A	N/A	0.635
0.1	0	N	0.924	N/A	N/A	N/A	N/A	1.000
0.3	0	N	1.000	N/A	N/A	N/A	N/A	1.000
0.5	0	N	1.000	N/A	N/A	N/A	N/A	1.000
0.7	0	N	1.000	N/A	N/A	N/A	N/A	1.000
0.9	0	N	1.000	N/A	N/A	N/A	N/A	1.000

TABLE I: RL results for all θ
(No occupant presence models)

APPENDIX B
MAB REINFORCEMENT LEARNING RESULTS FOR ALL θ FOR “PRESENCE” MODELS

θ	ARM	Test	ACC	F1	TPR	TNR	PREC	NIR
0.1	3	1	0.873	0.886	0.830	0.938	0.951	0.519
0.3	3	1	0.962	0.963	0.975	0.949	0.951	0.519
0.5	3	1	0.949	0.949	1.000	0.905	0.902	0.519
0.7	3	1	0.873	0.861	1.000	0.792	0.756	0.519
0.9	3	1	0.582	0.327	1.000	0.535	0.195	0.519
0.1	5	2	0.922	0.925	0.902	0.944	0.949	0.506
0.3	5	2	0.974	0.974	1.000	0.950	0.949	0.506
0.5	5	2	0.974	0.974	1.000	0.950	0.949	0.506
0.7	5	2	0.857	0.836	1.000	0.776	0.718	0.506
0.9	5	2	0.662	0.500	1.000	0.594	0.333	0.506
0.1	3	3	0.895	0.867	1.000	0.840	0.765	0.553
0.3	3	3	0.895	0.867	1.000	0.840	0.765	0.553
0.5	3	3	0.868	0.828	1.000	0.808	0.706	0.553
0.7	3	3	0.553	N/A	N/A	N/A	N/A	0.553
0.9	3	3	0.553	N/A	N/A	N/A	N/A	0.553
0.1	2	4	0.900	0.900	0.878	0.923	0.923	0.513
0.3	0	4	0.938	0.933	0.972	0.909	0.897	0.513
0.5	1	4	0.938	0.933	0.972	0.909	0.897	0.513
0.7	3	4	0.938	0.933	0.972	0.909	0.897	0.513
0.9	1	4	0.938	0.933	0.972	0.909	0.897	0.513
0.1	3	5	0.667	0.417	1.000	0.622	0.263	0.548
0.3	3	5	0.595	0.190	1.000	0.575	0.105	0.548
0.5	3	5	0.571	0.100	1.000	0.561	0.053	0.548
0.7	3	5	0.548	N/A	N/A	N/A	N/A	0.548
0.9	3	5	0.548	N/A	N/A	N/A	N/A	0.548
0.1	3	6	0.897	0.857	1.000	0.852	0.750	0.590
0.3	3	6	0.718	0.476	1.000	0.676	0.313	0.590
0.5	3	6	0.590	N/A	N/A	N/A	N/A	0.590
0.7	3	6	0.590	N/A	N/A	N/A	N/A	0.590
0.9	3	6	0.590	N/A	N/A	N/A	N/A	0.590
0.1	1	7	0.432	0.160	0.200	0.519	0.133	0.595
0.3	1	7	0.595	N/A	N/A	N/A	N/A	0.595
0.5	1	7	0.595	N/A	N/A	N/A	N/A	0.595
0.7	3	7	0.595	N/A	N/A	N/A	N/A	0.595
0.9	3	7	0.595	N/A	N/A	N/A	N/A	0.595
0.1	3	N	0.813	N/A	N/A	N/A	N/A	1.000
0.3	3	N	0.947	N/A	N/A	N/A	N/A	1.000
0.5	3	N	0.947	N/A	N/A	N/A	N/A	1.000
0.7	3	N	1.000	N/A	N/A	N/A	N/A	1.000
0.9	3	N	1.000	N/A	N/A	N/A	N/A	1.000

TABLE II: RL results for all θ parameters
(Occupant presence models)