

AutonomousRacingResults

Benjamin Evans

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Kernel Safety Tests

Firstly, we run random tests to ensure that the kernels are safe and that they do work.

map_name	SSS_avg_interventions	SSS_avg_times	SSS_std_dev	SSS_success_rate
porto	102.5	11.144	2.169259	100
columbia_small	122.0	11.170	0.083666	100

Learning Investigation

agent_name	rk	constant_reward	SSS_avg_times	SSS_success_rate	Wo_success_rate
KernelSSS_1_1Baseline	0.000	0	9.870	100	10
KernelSSS_1_2BasePenalty	0.000	1	10.497	100	100
KernelSSS_1_3Bias002	0.002	1	9.971	100	100
KernelSSS_1_4Bias004	0.004	1	9.925	100	100
KernelSSS_1_5Bias01	0.010	1	10.273	100	100
KernelSSS_1_7RaceZeroRk04	0.010	0	11.060	100	0

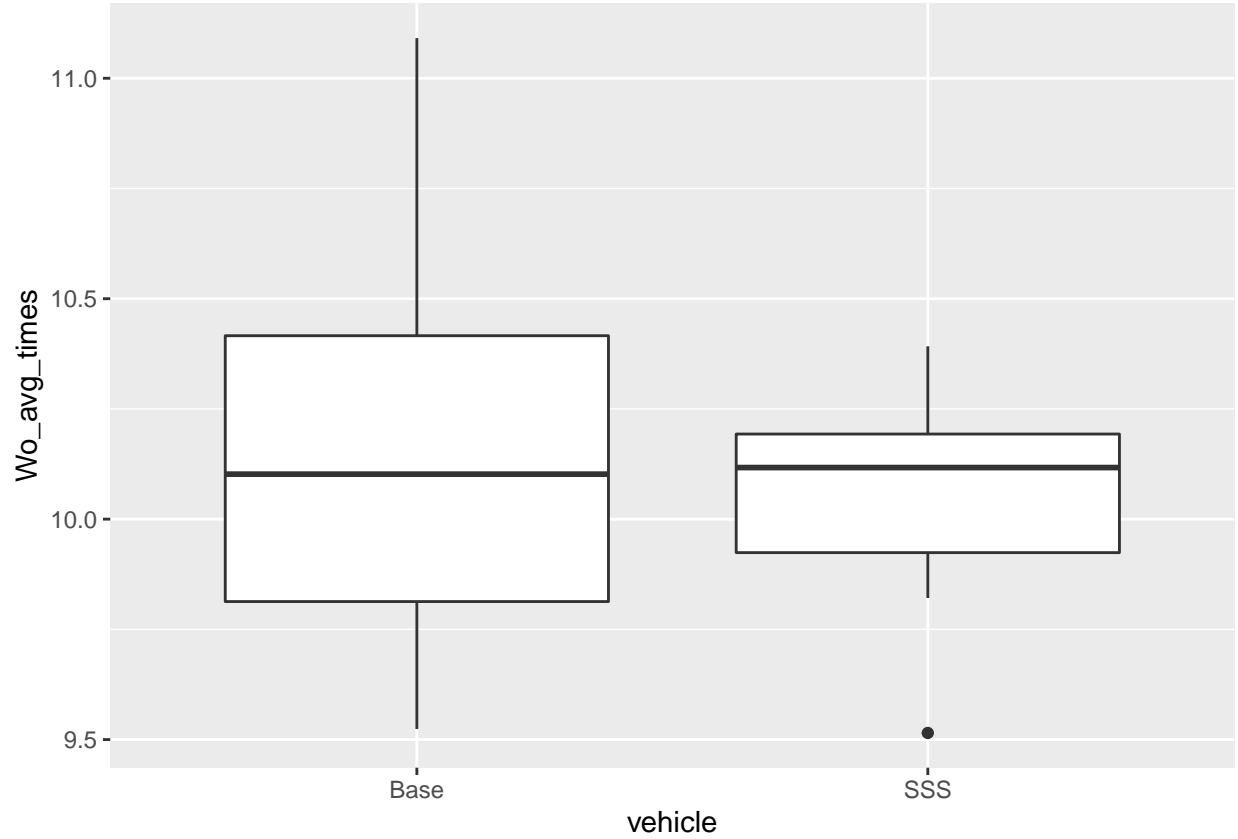
Training Comparision

Performance

agent_name	SSS_avg_times	SSS_success_rate	Wo_avg_times	Wo_success_rate
KernelSSS_309	10.128	100	10.138	100
KernelSSS_308	10.165	100	0.000	0
KernelSSS_307	10.004	100	10.009	100
KernelSSS_306	9.928	100	9.924	100
KernelSSS_305	10.210	100	10.193	100
KernelSSS_304	10.122	100	10.117	100
KernelSSS_303	9.817	100	9.821	100
KernelSSS_302	10.388	100	10.388	100
KernelSSS_301	9.527	100	9.515	100
KernelSSS_300	10.399	100	10.392	100
Baseline_109	NA	NA	10.502	100
Baseline_108	NA	NA	9.813	100
Baseline_107	NA	NA	10.416	100
Baseline_106	NA	NA	11.091	100

agent_name	SSS_avg_times	SSS_success_rate	Wo_avg_times	Wo_success_rate
Baseline_105	NA	NA	0.000	0
Baseline_104	NA	NA	9.763	100
Baseline_103	NA	NA	10.213	100
Baseline_102	NA	NA	9.815	100
Baseline_101	NA	NA	10.102	100
Baseline_100	NA	NA	9.524	100

Stability



Benchmarking

agent_name	SSS_avg_times	SSS_success_rate	Wo_avg_times	Wo_success_rate
PurePursuit_porto_1	10.26	100	10.26	100
PurePursuit_columbia_small_1	9.79	100	9.78	100
FGM_porto_1	10.09	100	10.04	100
FGM_columbia_small_1	9.82	100	9.81	100