Report Generated by Test Manager

Title: Path Following - Test Report

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Date: 29-Apr-2021 13:50:52

Summary

Name	Outcome	Duration (Seconds)
Path_Following_test	59 🗷 6🛭	2350
🛅 <u>Hyundai Azera</u>	12 🗷 1🛭	555
Puglia	•	86
Switzerland	8	104
Straight_Slow	•	31
TiltedStraight_Slow	•	49
Campania	•	119
Straight_Fast	•	4
TiltedStraight_Fast	•	5
1000mCurve_Slow	•	97
100mCurve_Slow	•	14
1000mCurve_Fast	•	13
100mCurve_Fast	•	2
Adriatic Highway A 14	•	19
Indianapolis Speedway	⊘	11
□ <u>BMW 325i</u>	12 🗷 1🛭	435
<u>Puglia</u>	•	57
Switzerland	8	73
Straight_Slow	•	26
TiltedStraight_Slow	⊘	39
Campania	⊘	84
Straight_Fast	•	4
TiltedStraight_Fast	•	4

1000mCurve_Slow	•	88
100mCurve_Slow	0	13
1000mCurve_Fast	0	13
100mCurve_Fast	Ø	2
Adriatic Highway A 14	•	21
Indianapolis Speedway	②	10
Ford E150	11 🗷 2🛭	442
Duglia Puglia	•	58
Switzerland	8	73
Straight_Slow	0	26
TiltedStraight_Slow	0	41
E <u>Campania</u>	8	87
Straight_Fast	0	3
TiltedStraight_Fast	0	5
1000mCurve_Slow	0	90
100mCurve_Slow	0	13
1000mCurve_Fast	Ø	12
100mCurve_Fast	0	3
Adriatic Highway A 14	0	20
Indianapolis Speedway	0	11
Suzuki Samurai	12 🗷 1🛭	444
■ <u>Puglia</u>	Ø	57
Switzerland	8	76
Straight_Slow	Ø	25
TiltedStraight_Slow	Ø	41

■ Campania	0	85
■ <u>Straight_Fast</u>	Ø	3
TiltedStraight_Fast	Ø	5
1000mCurve_Slow	Ø	90
100mCurve_Slow	Ø	15
1000mCurve_Fast	Ø	13
100mCurve_Fast	Ø	2
Adriatic Highway A 14	Ø	21
Indianapolis Speedway	Ø	11
Uolkswagen Beetle	12 🗸 18	474
Puglia	Ø	62
Switzerland	8	82
■ <u>Straight_Slow</u>	Ø	27
TiltedStraight_Slow	Ø	44
Campania	Ø	93
Straight_Fast	Ø	3
TiltedStraight_Fast	Ø	4
1000mCurve_Slow	Ø	98
100mCurve_Slow	Ø	13
1000mCurve_Fast	Ø	13
100mCurve_Fast	Ø	2
Adriatic Highway A 14	Ø	21
Indianapolis Speedway	Ø	12

Path_Following_test

Test Result Information

Result Type: Test File Result

Parent: None

Start Time: 29-Apr-2021 12:39:20 End Time: 29-Apr-2021 13:18:30

Outcome: Total: 65, Passed: 59, Failed: 6

Description:

These tests are aimed to evaluate the performance of a path follower in different scenarios

Test Suite Information

Name: Path_Following_test

Back to Report Summary

Hyundai Azera

Test Result Information

Result Type: Test Suite Result
Parent: Path Following test
Start Time: 29-Apr-2021 12:39:20
End Time: 29-Apr-2021 12:48:35

Outcome: Total: 13, Passed: 12, Failed: 1

Test Suite Information

Name: Hyundai Azera

Back to Report Summary

Puglia

Test Result Information

Result Type: Test Case Result Parent: Hyundai Azera

Start Time: 29-Apr-2021 12:39:20 End Time: 29-Apr-2021 12:40:46

Outcome: Passed

Description:

This scenario is taken from an Highway and it is a road that is straigth for the most with some smooth corners.

In this test we try to follow the path with a speed of 40 km/h.

Test Case Information

Name: Puglia

Type: Simulation Test

Verify Result

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path Following Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 651.65546907329576

Checksum: 202620085 696037187 1566738105 3145763362

Switzerland

Test Result Information

Result Type: Test Case Result Parent: Hyundai Azera

Start Time: 29-Apr-2021 12:40:46 End Time: 29-Apr-2021 12:42:30

Outcome: Failed

Cause of Failure: Failed criteria: Verification

Description:

This is the slowest scenario considered, with lots of corners one after another.

We try to follow this scenario with 15 km/h speed.

Test Case Information

Name: Switzerland Type: Simulation Test

Verify Result

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)</p>

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path Following Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration 1

Start Time: 0

Stop Time: 759.09368017233703

Checksum: 2813384938 3166038877 3099671345 3384845185

Straight_Slow

Test Result Information

Result Type: Test Case Result Parent: Hyundai Azera

Start Time: 29-Apr-2021 12:42:31 End Time: 29-Apr-2021 12:43:02

Outcome: Passed

Description:

Sample scenario consisting in a straight line.

Speed 10 km/h.

Test Case Information

Name: Straight_Slow Type: Simulation Test

Verify Result

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)</p>

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0 Stop Time: 360

Checksum: 1885704342 1639022262 1968123643 3686124085

TiltedStraight_Slow

Test Result Information

Result Type: Test Case Result Parent: Hyundai Azera

Start Time: 29-Apr-2021 12:43:02 End Time: 29-Apr-2021 12:43:51

Outcome: Passed

Description:

Sample scenario consisting in a straight line with a direction of 45 degrees in the X-Y plane.

Speed 10 km/h.

Test Case Information

Name: TiltedStraight_Slow Type: Simulation Test

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)</p>

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time:

Stop Time: 509.11688245431424

Checksum: 2284227124 546201088 1198533080 2624571421

Campania

Test Result Information

Result Type: Test Case Result Parent: Hyundai Azera

Start Time: 29-Apr-2021 12:43:51 End Time: 29-Apr-2021 12:45:50

Outcome: Passed

Description:

This scenario is made up by a sequence of smooth corners.

We try to follow this path with 30 km/h speed.

Test Case Information

Name: Campania

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)</p>

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 843.22474949384798

Checksum: 2515822173 245894926 3757805933 999516670

Straight_Fast

Test Result Information

Result Type: Test Case Result Parent: Hyundai Azera

Start Time: 29-Apr-2021 12:45:50 End Time: 29-Apr-2021 12:45:54

Outcome: Passed

Description:

Sample scenario consisiting in a straight line.

Speed: 100 km/h.

Test Case Information

Name: Straight_Fast Type: Simulation Test

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0 Stop Time: 36

Checksum: 3695475672 3866628070 3423434440 3754794952

TiltedStraight_Fast

Test Result Information

Result Type: Test Case Result Parent: Hyundai Azera

Start Time: 29-Apr-2021 12:45:54 End Time: 29-Apr-2021 12:45:59

Outcome: Passed

Description:

Sample scenario consisting in a straight line tilted by 135 degrees in the X-Y plane.

Speed: 100 km/h.

Test Case Information

Name: TiltedStraight_Fast Type: Simulation Test

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)</p>

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 50.911688245431421

Checksum: 3021946026 1579631363 1462477640 3610898823

1000mCurve_Slow

Test Result Information

Result Type: Test Case Result Parent: Hyundai Azera

Start Time: 29-Apr-2021 12:45:59 End Time: 29-Apr-2021 12:47:36

Outcome: Passed

Description:

Sample scenario consisting in a constant curve with radius 1000m.

Speed set to 20 km/h.

Test Case Information

Name: 1000mCurve_Slow Type: Simulation Test

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 848.24000000088108

Checksum: 3004570499 2739380835 3100569206 3150539238

100mCurve_Slow

Test Result Information

Result Type: Test Case Result Parent: Hyundai Azera

Start Time: 29-Apr-2021 12:47:36 End Time: 29-Apr-2021 12:47:50

Outcome: Passed

Description:

Sample scenario consisting in a constant curve with radius 100m.

Speed: 10 km/h.

Test Case Information

Name: 100mCurve_Slow Type: Simulation Test

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)</p>

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 169.64999999997565

Checksum: 658694597 4226064997 1514237116 1328707384

1000mCurve_Fast

Test Result Information

Result Type: Test Case Result Parent: Hyundai Azera

Start Time: 29-Apr-2021 12:47:50 End Time: 29-Apr-2021 12:48:03

Outcome: Passed

Description:

Sample scenario consisting in a constant curve with 1000m radius.

Speed: 100 km/h.

Test Case Information

Name: 1000mCurve_Fast Type: Simulation Test

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 169.65000000000313

Checksum: 1784879213 492416093 3665038557 1990414366

100mCurve_Fast

Test Result Information

Result Type: Test Case Result Parent: Hyundai Azera

Start Time: 29-Apr-2021 12:48:03 End Time: 29-Apr-2021 12:48:05

Outcome: Passed

Description:

Sample scenario consisting of a constant curve with radius 100m.

Speed: 100 km/h.

Test Case Information

Name: 100mCurve_Fast Type: Simulation Test

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 16.96999999999757

Checksum: 185083763 2040008444 1282780612 2456380744

Adriatic Highway A 14

Test Result Information

Result Type: Test Case Result Parent: Hyundai Azera

Start Time: 29-Apr-2021 12:48:05 End Time: 29-Apr-2021 12:48:24

Outcome: Passed

Description:

This scenario is taken from the A14 Highway which is a straight road for the most of it, with some high-speed corners.

We simulate this scenario at 100 km/h.

Test Case Information

Name: Adriatic Highway A 14

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 275.08204274327625

Checksum: 2317052902 4180118644 981246727 2737245983

Indianapolis Speedway

Test Result Information

Result Type: Test Case Result Parent: Hyundai Azera

Start Time: 29-Apr-2021 12:48:24 End Time: 29-Apr-2021 12:48:35

Outcome: Passed

Description:

This scenario is taken from the Indianapolis Speedway. We simulate it at 100 km/h.

Test Case Information

Name: Indianapolis Speedway

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)</p>

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration 1

Start Time: 0

Stop Time: 146.51791178475014

Checksum: 3889651783 1731957089 2002337100 853584640

BMW 325i

Test Result Information

Result Type: Test Suite Result
Parent: Path_Following_test
Start Time: 29-Apr-2021 12:48:35
End Time: 29-Apr-2021 12:55:50

Outcome: Total: 13, Passed: 12, Failed: 1

Test Suite Information

Name: BMW 325i

Back to Report Summary

Puglia

Test Result Information

Result Type: Test Case Result

Parent: BMW 325i

Start Time: 29-Apr-2021 12:48:35 End Time: 29-Apr-2021 12:49:32 Outcome: Passed

Description:

This scenario is taken from an Highway and it is a road that is straigth for the most with some smooth corners.

In this test we try to follow the path with a speed of 40 km/h.

Test Case Information

Name: Puglia

Type: Simulation Test

Verify Result

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)</p>

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time:

Stop Time: 651.65546907329576

Checksum: 202620085 696037187 1566738105 3145763362

Switzerland

Test Result Information

Result Type: Test Case Result

Parent: BMW 325i

Start Time: 29-Apr-2021 12:49:32 End Time: 29-Apr-2021 12:50:45

Outcome: Failed

Cause of Failure: Failed criteria: Verification

Description:

This is the slowest scenario considered, with lots of corners one after another.

We try to follow this scenario with 15 km/h speed.

Test Case Information

Name: Switzerland Type: Simulation Test

Verify Result

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration 1

Start Time: 0

Stop Time: 759.09368017233703

Checksum: 2813384938 3166038877 3099671345 3384845185

Straight_Slow

Test Result Information

Result Type: Test Case Result

Parent: BMW 325i

Start Time: 29-Apr-2021 12:50:45 End Time: 29-Apr-2021 12:51:11

Outcome: Passed

Description:

Sample scenario consisting in a straight line.

Speed 10 km/h.

Test Case Information

Name: Straight_Slow
Type: Simulation Test

Verify Result

Name

- Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>
- Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)</p>
- Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration 1

Start Time: 0 Stop Time: 360

Checksum: 1885704342 1639022262 1968123643 3686124085

$Tilted Straight_Slow$

Test Result Information

Result Type: Test Case Result

Parent: <u>BMW 325i</u>

Start Time: 29-Apr-2021 12:51:11 End Time: 29-Apr-2021 12:51:50

Outcome: Passed

Description:

Sample scenario consisting in a straight line with a direction of 45 degrees in the X-Y plane.

Speed 10 km/h.

Test Case Information

Name: TiltedStraight_Slow Type: Simulation Test

Verify Result

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)</p>

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 509.11688245431424

Checksum: 2284227124 546201088 1198533080 2624571421

Campania

Test Result Information

Result Type: Test Case Result

Parent: BMW 325i

Start Time: 29-Apr-2021 12:51:51 End Time: 29-Apr-2021 12:53:15

Outcome: Passed

Description:

This scenario is made up by a sequence of smooth corners.

We try to follow this path with 30 km/h speed.

Test Case Information

Name: Campania

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 843.22474949384798

Checksum: 2515822173 245894926 3757805933 999516670

Straight_Fast

Test Result Information

Result Type: Test Case Result

Parent: BMW 325i

Start Time: 29-Apr-2021 12:53:15 End Time: 29-Apr-2021 12:53:19

Outcome: Passed

Description:

Sample scenario consisiting in a straight line.

Speed: 100 km/h.

Test Case Information

Name: Straight_Fast Type: Simulation Test

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)</p>

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0 Stop Time: 36

Checksum: 3695475672 3866628070 3423434440 3754794952

TiltedStraight_Fast

Test Result Information

Result Type: Test Case Result

Parent: BMW 325i

Start Time: 29-Apr-2021 12:53:19 End Time: 29-Apr-2021 12:53:23

Outcome: Passed

Description:

Sample scenario consisting in a straight line tilted by 135 degrees in the X-Y plane.

Speed: 100 km/h.

Test Case Information

Name: TiltedStraight_Fast Type: Simulation Test

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 50.911688245431421

Checksum: 3021946026 1579631363 1462477640 3610898823

1000mCurve_Slow

Test Result Information

Result Type: Test Case Result

Parent: BMW 325i

Start Time: 29-Apr-2021 12:53:23 End Time: 29-Apr-2021 12:54:51

Outcome: Passed

Description:

Sample scenario consisting in a constant curve with radius 1000m.

Speed set to 20 km/h.

Test Case Information

Name: 1000mCurve_Slow Type: Simulation Test

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)</p>

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 848.24000000088108

Checksum: 3004570499 2739380835 3100569206 3150539238

100mCurve_Slow

Test Result Information

Result Type: Test Case Result

Parent: BMW 325i

Start Time: 29-Apr-2021 12:54:51 End Time: 29-Apr-2021 12:55:04

Outcome: Passed

Description:

Sample scenario consisting in a constant curve with radius 100m.

Speed: 10 km/h.

Test Case Information

Name: 100mCurve_Slow Type: Simulation Test

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 169.64999999997565

Checksum: 658694597 4226064997 1514237116 1328707384

1000mCurve_Fast

Test Result Information

Result Type: Test Case Result

Parent: BMW 325i

Start Time: 29-Apr-2021 12:55:04 End Time: 29-Apr-2021 12:55:17

Outcome: Passed

Description:

Sample scenario consisting in a constant curve with 1000m radius.

Speed: 100 km/h.

Test Case Information

Name: 1000mCurve_Fast Type: Simulation Test

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 169.65000000000313

Checksum: 1784879213 492416093 3665038557 1990414366

100mCurve_Fast

Test Result Information

Result Type: Test Case Result

Parent: BMW 325i

Start Time: 29-Apr-2021 12:55:17 End Time: 29-Apr-2021 12:55:19

Outcome: Passed

Description:

Sample scenario consisting of a constant curve with radius 100m.

Speed: 100 km/h.

Test Case Information

Name: 100mCurve_Fast Type: Simulation Test

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 16.96999999999757

Checksum: 185083763 2040008444 1282780612 2456380744

Adriatic Highway A 14

Test Result Information

Result Type: Test Case Result

Parent: BMW 325i

Start Time: 29-Apr-2021 12:55:19 End Time: 29-Apr-2021 12:55:40

Outcome: Passed

Description:

This scenario is taken from the A14 Highway which is a straight road for the most of it, with some high-speed corners.

We simulate this scenario at 100 km/h.

Test Case Information

Name: Adriatic Highway A 14

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 275.08204274327625

Checksum: 2317052902 4180118644 981246727 2737245983

Indianapolis Speedway

Test Result Information

Result Type: Test Case Result

Parent: BMW 325i

Start Time: 29-Apr-2021 12:55:40 End Time: 29-Apr-2021 12:55:50

Outcome: Passed

Description:

This scenario is taken from the Indianapolis Speedway. We simulate it at 100 km/h.

Test Case Information

Name: Indianapolis Speedway

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)</p>

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 146.51791178475014

Checksum: 3889651783 1731957089 2002337100 853584640

Ford E150

Test Result Information

Result Type: Test Suite Result
Parent: Path_Following_test
Start Time: 29-Apr-2021 12:55:50
End Time: 29-Apr-2021 13:03:12

Outcome: Total: 13, Passed: 11, Failed: 2

Test Suite Information

Name: Ford E150

Back to Report Summary

Puglia

Test Result Information

Result Type: Test Case Result

Parent: Ford E150

Start Time: 29-Apr-2021 12:55:50 End Time: 29-Apr-2021 12:56:48 Outcome: Passed

Description:

This scenario is taken from an Highway and it is a road that is straigth for the most with some smooth corners.

In this test we try to follow the path with a speed of 40 km/h.

Test Case Information

Name: Puglia

Type: Simulation Test

Verify Result

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)</p>

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: (

Stop Time: 651.65546907329576

Checksum: 202620085 696037187 1566738105 3145763362

Switzerland

Test Result Information

Result Type: Test Case Result

Parent: Ford E150

Start Time: 29-Apr-2021 12:56:48 End Time: 29-Apr-2021 12:58:01

Outcome: Failed

Cause of Failure: Failed criteria: Verification

Description:

This is the slowest scenario considered, with lots of corners one after another.

We try to follow this scenario with 15 km/h speed.

Test Case Information

Name: Switzerland Type: Simulation Test

Verify Result

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic obstacle avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration 1

Start Time: 0

Stop Time: 759.09368017233703

Checksum: 2813384938 3166038877 3099671345 3384845185

Straight_Slow

Test Result Information

Result Type: Test Case Result

Parent: Ford E150

Start Time: 29-Apr-2021 12:58:01 End Time: 29-Apr-2021 12:58:27

Outcome: Passed

Description:

Sample scenario consisting in a straight line.

Speed 10 km/h.

Test Case Information

Name: Straight_Slow
Type: Simulation Test

Verify Result

Name

- Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>
- Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)
- Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration 1

Start Time: 0 Stop Time: 360

Checksum: 1885704342 1639022262 1968123643 3686124085

$Tilted Straight_Slow$

Test Result Information

Result Type: Test Case Result

Parent: Ford E150

Start Time: 29-Apr-2021 12:58:27 End Time: 29-Apr-2021 12:59:08

Outcome: Passed

Description:

Sample scenario consisting in a straight line with a direction of 45 degrees in the X-Y plane.

Speed 10 km/h.

Test Case Information

Name: TiltedStraight_Slow Type: Simulation Test

Verify Result

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)</p>

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration 1

Start Time: 0

Stop Time: 509.11688245431424

Checksum: 2284227124 546201088 1198533080 2624571421

Campania

Test Result Information

Result Type: Test Case Result

Parent: Ford E150

Start Time: 29-Apr-2021 12:59:08 End Time: 29-Apr-2021 13:00:35

Outcome: Failed

Cause of Failure: Failed criteria: Verification

Description:

This scenario is made up by a sequence of smooth corners.

We try to follow this path with 30 km/h speed.

Test Case Information

Name: Campania

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 843.22474949384798

Checksum: 2515822173 245894926 3757805933 999516670

Straight_Fast

Test Result Information

Result Type: Test Case Result

Parent: Ford E150

Start Time: 29-Apr-2021 13:00:35 End Time: 29-Apr-2021 13:00:38

Outcome: Passed

Description:

Sample scenario consisiting in a straight line.

Speed: 100 km/h.

Test Case Information

Name: Straight_Fast Type: Simulation Test

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0 Stop Time: 36

Checksum: 3695475672 3866628070 3423434440 3754794952

TiltedStraight_Fast

Test Result Information

Result Type: Test Case Result

Parent: Ford E150

Start Time: 29-Apr-2021 13:00:38 End Time: 29-Apr-2021 13:00:43

Outcome: Passed

Description:

Sample scenario consisting in a straight line tilted by 135 degrees in the X-Y plane.

Speed: 100 km/h.

Test Case Information

Name: TiltedStraight_Fast Type: Simulation Test

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time:

Stop Time: 50.911688245431421

Checksum: 3021946026 1579631363 1462477640 3610898823

1000mCurve_Slow

Test Result Information

Result Type: Test Case Result

Parent: Ford E150

Start Time: 29-Apr-2021 13:00:43 End Time: 29-Apr-2021 13:02:13

Outcome: Passed

Description:

Sample scenario consisting in a constant curve with radius 1000m.

Speed set to 20 km/h.

Test Case Information

Name: 1000mCurve_Slow Type: Simulation Test

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 848.24000000088108

Checksum: 3004570499 2739380835 3100569206 3150539238

100mCurve_Slow

Test Result Information

Result Type: Test Case Result

Parent: Ford E150

Start Time: 29-Apr-2021 13:02:13 End Time: 29-Apr-2021 13:02:26

Outcome: Passed

Description:

Sample scenario consisting in a constant curve with radius 100m.

Speed: 10 km/h.

Test Case Information

Name: 100mCurve_Slow Type: Simulation Test

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)</p>

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time:

Stop Time: 169.64999999997565

Checksum: 658694597 4226064997 1514237116 1328707384

1000mCurve_Fast

Test Result Information

Result Type: Test Case Result

Parent: Ford E150

Start Time: 29-Apr-2021 13:02:26 End Time: 29-Apr-2021 13:02:38

Outcome: Passed

Description:

Sample scenario consisting in a constant curve with 1000m radius.

Speed: 100 km/h.

Test Case Information

Name: 1000mCurve_Fast Type: Simulation Test

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 169.65000000000313

Checksum: 1784879213 492416093 3665038557 1990414366

100mCurve_Fast

Test Result Information

Result Type: Test Case Result

Parent: Ford E150

Start Time: 29-Apr-2021 13:02:38 End Time: 29-Apr-2021 13:02:41

Outcome: Passed

Description:

Sample scenario consisting of a constant curve with radius 100m.

Speed: 100 km/h.

Test Case Information

Name: 100mCurve_Fast Type: Simulation Test

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 16.96999999999757

Checksum: 185083763 2040008444 1282780612 2456380744

Adriatic Highway A 14

Test Result Information

Result Type: Test Case Result

Parent: Ford E150

Start Time: 29-Apr-2021 13:02:41 End Time: 29-Apr-2021 13:03:01

Outcome: Passed

Description:

This scenario is taken from the A14 Highway which is a straight road for the most of it, with some high-speed corners.

We simulate this scenario at 100 km/h.

Test Case Information

Name: Adriatic Highway A 14

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 275.08204274327625

Checksum: 2317052902 4180118644 981246727 2737245983

Indianapolis Speedway

Test Result Information

Result Type: Test Case Result

Parent: Ford E150

Start Time: 29-Apr-2021 13:03:01 End Time: 29-Apr-2021 13:03:12

Outcome: Passed

Description:

This scenario is taken from the Indianapolis Speedway. We simulate it at 100 km/h.

Test Case Information

Name: Indianapolis Speedway

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)</p>

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration 1

Start Time: 0

Stop Time: 146.51791178475014

Checksum: 3889651783 1731957089 2002337100 853584640

Suzuki Samurai

Test Result Information

Result Type: Test Suite Result
Parent: Path_Following_test
Start Time: 29-Apr-2021 13:03:12
End Time: 29-Apr-2021 13:10:36

Outcome: Total: 13, Passed: 12, Failed: 1

Test Suite Information

Name: Suzuki Samurai

Back to Report Summary

Puglia

Test Result Information

Result Type: Test Case Result Parent: Suzuki Samurai

Start Time: 29-Apr-2021 13:03:12 End Time: 29-Apr-2021 13:04:09 Outcome: Passed

Description:

This scenario is taken from an Highway and it is a road that is straigth for the most with some smooth corners.

In this test we try to follow the path with a speed of 40 km/h.

Test Case Information

Name: Puglia

Type: Simulation Test

Verify Result

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)</p>

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time:

Stop Time: 651.65546907329576

Checksum: 202620085 696037187 1566738105 3145763362

Switzerland

Test Result Information

Result Type: Test Case Result Parent: Suzuki Samurai

Start Time: 29-Apr-2021 13:04:09 End Time: 29-Apr-2021 13:05:25

Outcome: Failed

Cause of Failure: Failed criteria: Verification

Description:

This is the slowest scenario considered, with lots of corners one after another.

We try to follow this scenario with 15 km/h speed.

Test Case Information

Name: Switzerland Type: Simulation Test

Verify Result

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration 1

Start Time: 0

Stop Time: 759.09368017233703

Checksum: 2813384938 3166038877 3099671345 3384845185

Straight_Slow

Test Result Information

Result Type: Test Case Result
Parent: Suzuki Samurai
Start Time: 29-Apr-2021 13:05:25
End Time: 29-Apr-2021 13:05:50

Outcome: Passed

Description:

Sample scenario consisting in a straight line.

Speed 10 km/h.

Test Case Information

Name: Straight_Slow Type: Simulation Test

Verify Result

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)</p>

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration 1

Start Time: 0 Stop Time: 360

Checksum: 1885704342 1639022262 1968123643 3686124085

$Tilted Straight_Slow$

Test Result Information

Result Type: Test Case Result Parent: Suzuki Samurai

Start Time: 29-Apr-2021 13:05:50 End Time: 29-Apr-2021 13:06:31

Outcome: Passed

Description:

Sample scenario consisting in a straight line with a direction of 45 degrees in the X-Y plane.

Speed 10 km/h.

Test Case Information

Name: TiltedStraight_Slow Type: Simulation Test

Verify Result

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)</p>

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 509.11688245431424

Checksum: 2284227124 546201088 1198533080 2624571421

Campania

Test Result Information

Result Type: Test Case Result Parent: Suzuki Samurai

Start Time: 29-Apr-2021 13:06:31 End Time: 29-Apr-2021 13:07:56

Outcome: Passed

Description:

This scenario is made up by a sequence of smooth corners.

We try to follow this path with 30 km/h speed.

Test Case Information

Name: Campania

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 843.22474949384798

Checksum: 2515822173 245894926 3757805933 999516670

Straight_Fast

Test Result Information

Result Type: Test Case Result Parent: Suzuki Samurai

Start Time: 29-Apr-2021 13:07:56 End Time: 29-Apr-2021 13:07:59

Outcome: Passed

Description:

Sample scenario consisiting in a straight line.

Speed: 100 km/h.

Test Case Information

Name: Straight_Fast Type: Simulation Test

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0 Stop Time: 36

Checksum: 3695475672 3866628070 3423434440 3754794952

TiltedStraight_Fast

Test Result Information

Result Type: Test Case Result Parent: Suzuki Samurai

Start Time: 29-Apr-2021 13:07:59 End Time: 29-Apr-2021 13:08:04

Outcome: Passed

Description:

Sample scenario consisting in a straight line tilted by 135 degrees in the X-Y plane.

Speed: 100 km/h.

Test Case Information

Name: TiltedStraight_Fast Type: Simulation Test

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 50.911688245431421

Checksum: 3021946026 1579631363 1462477640 3610898823

1000mCurve_Slow

Test Result Information

Result Type: Test Case Result Parent: Suzuki Samurai

Start Time: 29-Apr-2021 13:08:04 End Time: 29-Apr-2021 13:09:34

Outcome: Passed

Description:

Sample scenario consisting in a constant curve with radius 1000m.

Speed set to 20 km/h.

Test Case Information

Name: 1000mCurve_Slow Type: Simulation Test

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 848.24000000088108

Checksum: 3004570499 2739380835 3100569206 3150539238

100mCurve_Slow

Test Result Information

Result Type: Test Case Result Parent: Suzuki Samurai

Start Time: 29-Apr-2021 13:09:34 End Time: 29-Apr-2021 13:09:49

Outcome: Passed

Description:

Sample scenario consisting in a constant curve with radius 100m.

Speed: 10 km/h.

Test Case Information

Name: 100mCurve_Slow Type: Simulation Test

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 169.64999999997565

Checksum: 658694597 4226064997 1514237116 1328707384

1000mCurve_Fast

Test Result Information

Result Type: Test Case Result Parent: Suzuki Samurai

Start Time: 29-Apr-2021 13:09:49 End Time: 29-Apr-2021 13:10:02

Outcome: Passed

Description:

Sample scenario consisting in a constant curve with 1000m radius.

Speed: 100 km/h.

Test Case Information

Name: 1000mCurve_Fast Type: Simulation Test

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 169.65000000000313

Checksum: 1784879213 492416093 3665038557 1990414366

100mCurve_Fast

Test Result Information

Result Type: Test Case Result
Parent: Suzuki Samurai

Start Time: 29-Apr-2021 13:10:02 End Time: 29-Apr-2021 13:10:04

Outcome: Passed

Description:

Sample scenario consisting of a constant curve with radius 100m.

Speed: 100 km/h.

Test Case Information

Name: 100mCurve_Fast Type: Simulation Test

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 16.96999999999757

Checksum: 185083763 2040008444 1282780612 2456380744

Adriatic Highway A 14

Test Result Information

Result Type: Test Case Result Parent: Suzuki Samurai

Start Time: 29-Apr-2021 13:10:04 End Time: 29-Apr-2021 13:10:25

Outcome: Passed

Description:

This scenario is taken from the A14 Highway which is a straight road for the most of it, with some high-speed corners.

We simulate this scenario at 100 km/h.

Test Case Information

Name: Adriatic Highway A 14

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 275.08204274327625

Checksum: 2317052902 4180118644 981246727 2737245983

Indianapolis Speedway

Test Result Information

Result Type: Test Case Result
Parent: Suzuki Samurai
Start Times: 20. Apr. 2021 12:1

Start Time: 29-Apr-2021 13:10:25 End Time: 29-Apr-2021 13:10:36

Outcome: Passed

Description:

This scenario is taken from the Indianapolis Speedway. We simulate it at 100 km/h.

Test Case Information

Name: Indianapolis Speedway

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)</p>

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration 1

Start Time: 0

Stop Time: 146.51791178475014

Checksum: 3889651783 1731957089 2002337100 853584640

Volkswagen Beetle

Test Result Information

Result Type: Test Suite Result
Parent: Path_Following_test
Start Time: 29-Apr-2021 13:10:36
End Time: 29-Apr-2021 13:18:30

Outcome: Total: 13, Passed: 12, Failed: 1

Test Suite Information

Name: Volkswagen Beetle

Back to Report Summary

Puglia

Test Result Information

Result Type: Test Case Result
Parent: Volkswagen Beetle
Start Time: 29-Apr-2021 13:10:36
End Time: 29-Apr-2021 13:11:38

Outcome: Passed

Description:

This scenario is taken from an Highway and it is a road that is straigth for the most with some smooth corners.

In this test we try to follow the path with a speed of 40 km/h.

Test Case Information

Name: Puglia

Type: Simulation Test

Verify Result

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time:

Stop Time: 651.65546907329576

Checksum: 202620085 696037187 1566738105 3145763362

Switzerland

Test Result Information

Result Type: Test Case Result
Parent: Volkswagen Beetle
Start Time: 29-Apr-2021 13:11:38
End Time: 29-Apr-2021 13:13:00

Outcome: Failed

Cause of Failure: Failed criteria: Verification

Description:

This is the slowest scenario considered, with lots of corners one after another.

We try to follow this scenario with 15 km/h speed.

Test Case Information

Name: Switzerland Type: Simulation Test

Verify Result

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration 1

Start Time: 0

Stop Time: 759.09368017233703

Checksum: 2813384938 3166038877 3099671345 3384845185

Straight_Slow

Test Result Information

Result Type: Test Case Result
Parent: Volkswagen Beetle
Start Time: 29-Apr-2021 13:13:00
End Time: 29-Apr-2021 13:13:27

Outcome: Passed

Description:

Sample scenario consisting in a straight line.

Speed 10 km/h.

Test Case Information

Name: Straight_Slow Type: Simulation Test

Verify Result

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)</p>

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration 1

Start Time: 0 Stop Time: 360

Checksum: 1885704342 1639022262 1968123643 3686124085

$Tilted Straight_Slow$

Test Result Information

Result Type: Test Case Result
Parent: Volkswagen Beetle
Start Time: 29-Apr-2021 13:13:27
End Time: 29-Apr-2021 13:14:11

Outcome: Passed

Description:

Sample scenario consisting in a straight line with a direction of 45 degrees in the X-Y plane.

Speed 10 km/h.

Test Case Information

Name: TiltedStraight_Slow Type: Simulation Test

Verify Result

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)</p>

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 509.11688245431424

Checksum: 2284227124 546201088 1198533080 2624571421

Campania

Test Result Information

Result Type: Test Case Result
Parent: Volkswagen Beetle
Start Time: 29-Apr-2021 13:14:11
End Time: 29-Apr-2021 13:15:44

Outcome: Passed

Description:

This scenario is made up by a sequence of smooth corners.

We try to follow this path with 30 km/h speed.

Test Case Information

Name: Campania

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)</p>

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 843.22474949384798

Checksum: 2515822173 245894926 3757805933 999516670

Straight_Fast

Test Result Information

Result Type: Test Case Result
Parent: Volkswagen Beetle
Start Time: 29-Apr-2021 13:15:44
End Time: 29-Apr-2021 13:15:47

Outcome: Passed

Description:

Sample scenario consisiting in a straight line.

Speed: 100 km/h.

Test Case Information

Name: Straight_Fast Type: Simulation Test

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0 Stop Time: 36

Checksum: 3695475672 3866628070 3423434440 3754794952

TiltedStraight_Fast

Test Result Information

Result Type: Test Case Result
Parent: Volkswagen Beetle
Start Time: 29-Apr-2021 13:15:47
End Time: 29-Apr-2021 13:15:51

Outcome: Passed

Description:

Sample scenario consisting in a straight line tilted by 135 degrees in the X-Y plane.

Speed: 100 km/h.

Test Case Information

Name: TiltedStraight_Fast Type: Simulation Test

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 50.911688245431421

Checksum: 3021946026 1579631363 1462477640 3610898823

1000mCurve_Slow

Test Result Information

Result Type: Test Case Result
Parent: Volkswagen Beetle
Start Time: 29-Apr-2021 13:15:51
End Time: 29-Apr-2021 13:17:29

Outcome: Passed

Description:

Sample scenario consisting in a constant curve with radius 1000m.

Speed set to 20 km/h.

Test Case Information

Name: 1000mCurve_Slow Type: Simulation Test

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 848.24000000088108

Checksum: 3004570499 2739380835 3100569206 3150539238

100mCurve_Slow

Test Result Information

Result Type: Test Case Result
Parent: Volkswagen Beetle
Start Time: 29-Apr-2021 13:17:29
End Time: 29-Apr-2021 13:17:42

Outcome: Passed

Description:

Sample scenario consisting in a constant curve with radius 100m.

Speed: 10 km/h.

Test Case Information

Name: 100mCurve_Slow Type: Simulation Test

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 169.6499999997565

Checksum: 658694597 4226064997 1514237116 1328707384

1000mCurve_Fast

Test Result Information

Result Type: Test Case Result
Parent: Volkswagen Beetle
Start Time: 29-Apr-2021 13:17:42
End Time: 29-Apr-2021 13:17:55

Outcome: Passed

Description:

Sample scenario consisting in a constant curve with 1000m radius.

Speed: 100 km/h.

Test Case Information

Name: 1000mCurve_Fast Type: Simulation Test

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 169.65000000000313

Checksum: 1784879213 492416093 3665038557 1990414366

100mCurve_Fast

Test Result Information

Result Type: Test Case Result
Parent: Volkswagen Beetle
Start Time: 29-Apr-2021 13:17:55
End Time: 29-Apr-2021 13:17:57

Outcome: Passed

Description:

Sample scenario consisting of a constant curve with radius 100m.

Speed: 100 km/h.

Test Case Information

Name: 100mCurve_Fast Type: Simulation Test

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 16.96999999999757

Checksum: 185083763 2040008444 1282780612 2456380744

Adriatic Highway A 14

Test Result Information

Result Type: Test Case Result
Parent: Volkswagen Beetle
Start Time: 29-Apr-2021 13:17:57
End Time: 29-Apr-2021 13:18:18

Outcome: Passed

Description:

This scenario is taken from the A14 Highway which is a straight road for the most of it, with some high-speed corners.

We simulate this scenario at 100 km/h.

Test Case Information

Name: Adriatic Highway A 14

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance
Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration1

Start Time: 0

Stop Time: 275.08204274327625

Checksum: 2317052902 4180118644 981246727 2737245983

Indianapolis Speedway

Test Result Information

Result Type: Test Case Result
Parent: Volkswagen Beetle
Start Time: 29-Apr-2021 13:18:18
End Time: 29-Apr-2021 13:18:30

Outcome: Passed

Description:

This scenario is taken from the Indianapolis Speedway. We simulate it at 100 km/h.

Test Case Information

Name: Indianapolis Speedway

Name

Lateral Deviation Assessment/GlobalAssessments:verify(duration(lateral_dev > 0.75,sec)<1)</p>

Maximum Lateral Deviation Assessment/Maximum_Lateral_Dev_Assessment:verify(lateral_dev < 1)

Lateral Acceleration Assessment/Global_Assessment:verify(duration(Lateral_acceleration>=2,sec)<=0.5)</p>

Simulation

System Under Test Information

Model: Dynamic_obstacle_avoidance

Harness: Path_Following_Harness

Harness Owner: Dynamic_obstacle_avoidance/Subsystem

Simulation Mode: normal

Configuration Set: Configuration 1

Start Time: 0

Stop Time: 146.51791178475014

Checksum: 3889651783 1731957089 2002337100 853584640