

INSTRUCTIONS:

Fill out the hazard analysis and risk assessment below.

HA-001 should be for the lane departure warning function as discussed in the lecture.

HA-002 should be for the lane keeping assistance function as discussed in the lecture.

Then come up with your own situations and hazards for the lane assistance function.

When finished, export your spreadsheet as a pdf file so that a reviewer can see your work.

Hazard ID			
	Operational Mode	Operational Scenario	Environmental Details
HA-001	OM03 - Normal Driving	OS04 - Highway	EN06 - Rain (slippery road)
HA-002	OM03 - Normal Driving	OS03 - Country Road	EN01 - Normal
HA-003	OM03 - Normal Driving	OS04 - Highway	EN01 - Normal
HA-004	OM03 - Normal Driving	OS03 - Country Road	EN01 - Normal

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stance system. Fill in the HA-003 and HA-004 rows.
er can easily see your work.

Situational Analysis			
Situation Details	Other Details (optional)	Item Usage (function)	Situation Description
SD02 - High speed		IU01 - Correctly	Normal driving on a highway during rain
SD02 - High speed		IU02 - Incorrectly	Normal driving on a country road during
SD02 - High speed		IU01 - Correctly	Normal driving on a highway during
SD02 - High speed		IU01 - Correctly	Normal driving on a country road during

Hazard Identification			
Function	Deviation	Deviation Details	Hazardous Event (resulting effect)
Lane Departure	DV04 - Actor	The Lane Departure	EV00 - Collision with
Lane Keeping	DV03 -	Lane Keeping function is	EV00 - Collision with
Lane Departure	DV02 -	The camera sensor stop	EV00 - Collision with
Lane Keeping	DV02 -	The camera sensor stop	EV00 - Collision with

Event Details	Hazardous Event Description	Exposure (of situation)
High haptic feedback can affect	The Lane Departure Warning	E3 - Medium
Driver use the function as if the	The driver do not use the	E2 - Low
The Lane Departure Warning	The Lane Departure Warning	E3 - Medium
The Lane Keeping Assistance	The Lane Keeping Assistance	E3 - Medium

Hazardous Event Classification			
Rationale (for exposure)	Severity (of potential harm)	Rationale (for severity)	Controllability (of hazardous event)
Driving on a highway with rain	S3 - Life-threatening or	Collitions at high	C3 - Difficult to control or
The conivation beween driving at	S3 - Life-threatening or	Collitions at high	C3 - Difficult to control or
Driving on a highway with rain	S3 - Life-threatening or	Collitions at high	C3 - Difficult to control or
Driving on a highway with rain	S3 - Life-threatening or	Collitions at high	C3 - Difficult to control or

	Determination of ASIL and Safety Goals	
Rationale (for controllability)	ASIL Determination	Safety Goal
It is difficult to stay calm and react properly when	C	The oscillating steering torque from the
When the driver loose focus on driving, it is	B	The Lane Keeping Assistance function
When the driver loose control of the vechicle is	C	The Lane Departure Warning function
When the driver loose control of the vechicle is	C	The Lane Keeping Assistance function