INSTRUCTIONS:
Fill out the hazard analysis and risk assessment below.
HA-001 should be for the lane departure warning function as discussed in tl
HA-002 should be for the lane keeping assistance function as discussed in t
Then come up with your own situations and hazards for the lane assistance
When finished, export your spreadsheet as a pdf file so that a reviewer can

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 conditions
HA-003	OM03 - Normal driving	OS09 - Road tunnel	EN03 - Fog (degraded view)
HA-004	OM03 - Normal driving	OS05 - Mountain Pass	EN08 - Glace (slippery road)

he lecture.
the lecture.
: system. Fill in the HA-003 and HA-004 rows.
easily see your work.

Situational Analysis

Situation Details	Other Details (optional)	Item Usage (function)	Situation Description
SD02 - High speed		IU01 - Correctly used	Normal Driving on Highway during
SD02 - High speed		IU02 - Incorrectly	Normal Driving on Country Road during
SD02 - High speed	Night time + Obstacle	IU01 - Correctly	Normal Driving on Road tunnel during Fog
SD02 - High speed		IU01 - Correctly	Normal Driving on Mountain Pass during

The Driver used the functi

Hazard Identification

Function	Deviation	Deviation Details	Hazardous Event (resulting effect)
Lane Departure	DV04 - Actor	The LDW function applies	EV00 - Collision with
Lane Keeping	DV03 -	Lane Keeping Function is	EV00 - Collision with
Low beam illuminates	DV01 -	Both headlights stop	EV04 - Front collision
Lane Departure	DV04 - Actor	The LDW function applies	EV03 - Car spins out

on to mimic autonomous car, thus lost focus from driving.

Event Details	Hazardous Event Description	Exposure (of situation)
High haptic feedback can affect	The LDW function applies too	E3 - Medium
The Driver used the function to	Lane keeping function is	E2 - Low
Vehicle crashes into the obstacle	Total loss of low beam	E2 - Low
High haptic feedback can affect	The LDW function applies too	E2 - Low

Hazardous Event Classification			
Rationale (for exposure)	**Severity (of potential harm)**	**Rationale (for severity)**	**Controllability (of hazardous event)**
Driving on highway during rain	S3 - Life-threatening or fatal injuries	collision at high spped	C3 - Difficult to control or uncontrollable
This can happen few times to a	S3 - Life-threatening or	collision at high spped	C3 - Difficult to control or
Tunnel driving is part of regular	S3 - Life-threatening or	During Fog visibility is	C3 - Difficult to control or
Glace happens few times a year	S3 - Life-threatening or	collision at high spped	C3 - Difficult to control or

	Determination of ASIL and Safety Goals	
Rationale (for controllability)	**ASIL Determination**	**Safety Goal**
Its difficult to control car with excessive vibratons	C	Oscillating tourque should be limited
Lane assistance system is always on , driver may	B	Lane assistance system should be time
Since illumination is low and visibility is	B	Total loss of low beam shall be
Its difficult to control car with excessive vibratons	B	Oscillating tourque should be limited