

## Study Guide for Week #13

# Module 13: Autonomous Vehicle Safety Guidelines

## **Material Outline**

- (1)Background
- (2) Safety Elements: System Safety
- (3) Safety Elements: Operational Design
- (4) Object Detection
- (5) Minimal Risk
- (6) Human Machine Interface (HMI)
- (7) Avoiding crash

### **Provided Documents**

Documents	Description
Week13-WatchMEfirst	Video explaining the goals of this week
Week13-StudyGuide.pdf	The guiding documents for the materials covered in this week, student work, and learning outcomes of this week.
Week13-Slides.ppt	PowerPoint slides regarding autonomous vehicle safety guidelines
Week13-Lecture	Video Lecture
Week13-PaperReading	A paper about "An overview of Autonomous Vehicles Safety"
Week13-Resources: Reading -> Vehicle Safety Guide USDOT	The guide for safety in autonomous vehicles released by the Department of Transportation

Documents	Description
Week13-Resources: News -> Autonomous Car News	News related to "US DOT releases new Automated Driving System guidance"
Week13-Checklist	A checklist for your reference

#### **Student Assignments**

- Digest PowerPoint slides
- Watch the Lecture (or attend the in-person lecture)
- Read the Week 13 Material (All readings and papers provided)
- Submit your intermediate project report

# **Learning Goals**

This module is part of the learning outcomes

(1)Understand terminology in autonomous vehicles safety guidelines