



# Road Recognition - INTRODUCTION



- In the case of intelligent vehicles, the perception task is referred to as road scene understanding.
- It involves using different sensors combined with automatic reasoning, in order to create a synthetic representation of the environment around the vehicle.





# NEED FOR ROAD RECOGNITION





# ROAD RECOGNITION SYSTEM



- Road recognition typically refers to the process of identifying and understanding roads in images or videos, often as part of computer vision systems.
- Here are some key aspects and techniques involved in road recognition.





# PROCESS

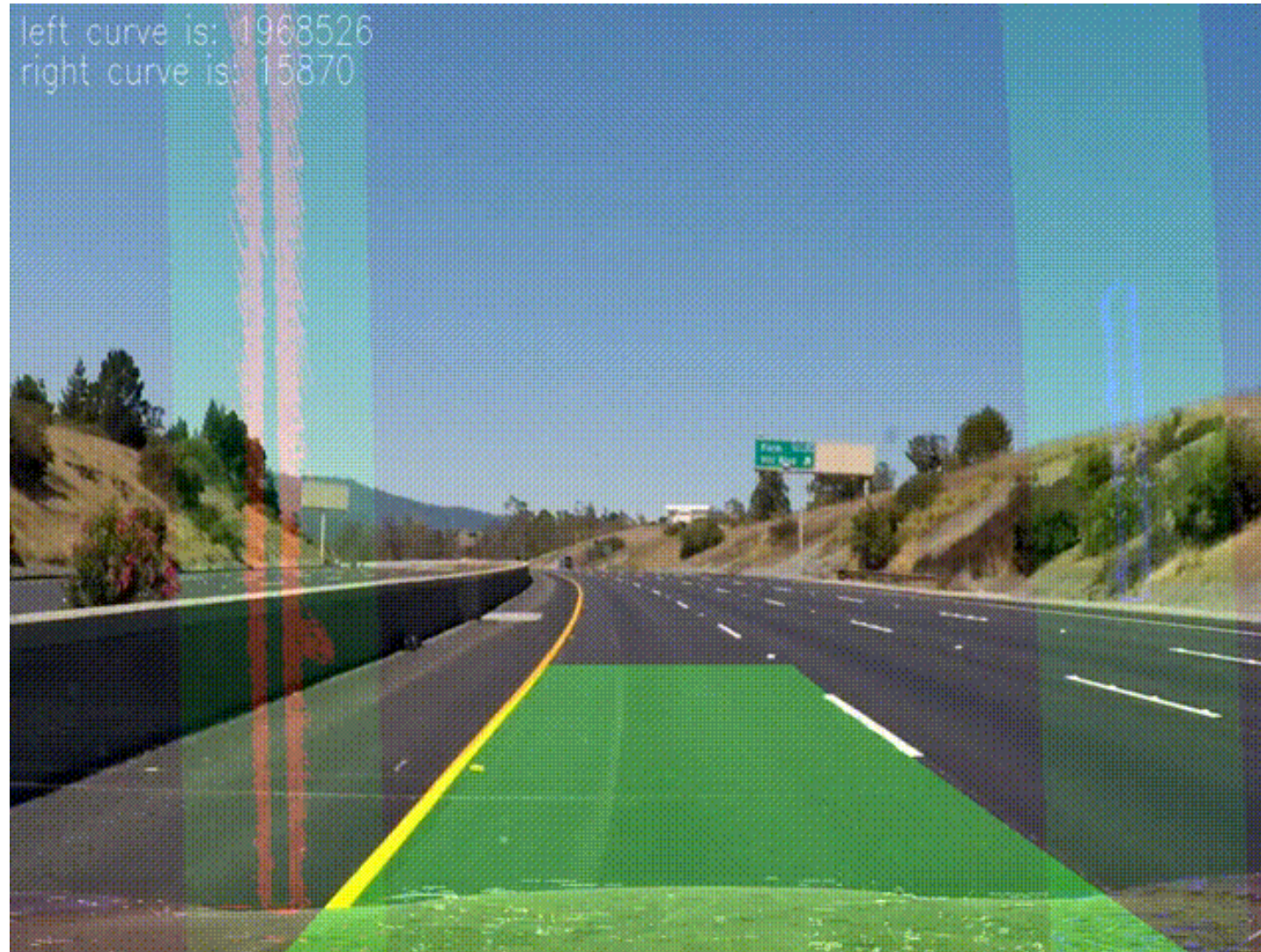


- ❖ Road/Lane Tracking
- ❖ Road Sign Detection
- ❖ Traffic-Light Detection
- ❖ Visibility Assessment
- ❖ Vehicle Detection
- ❖ Pedestrian Detection





# LANE TRACKING





# ROAD SIGN DETECTION





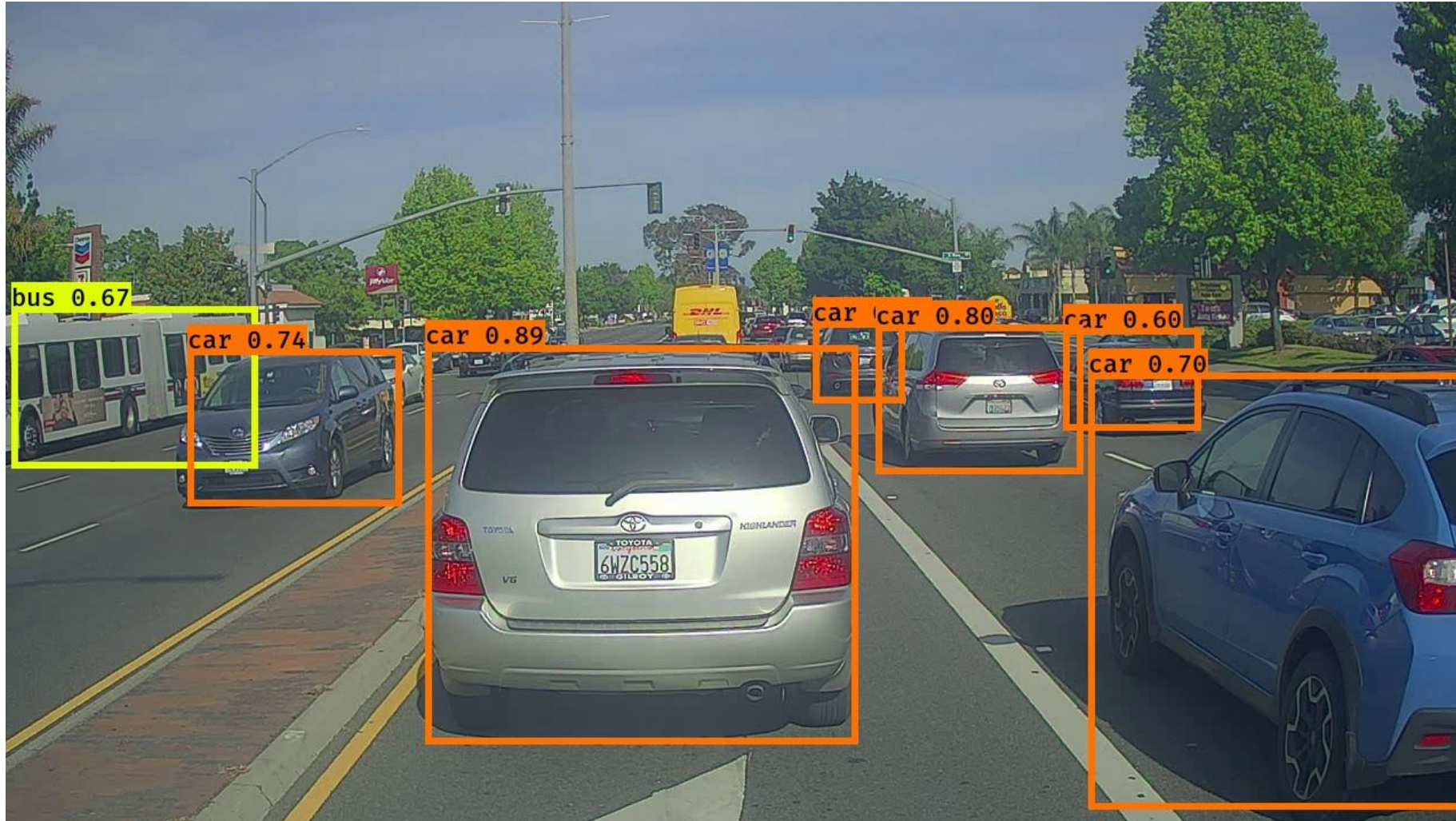


# TRAFFIC LIGHT DETECTION





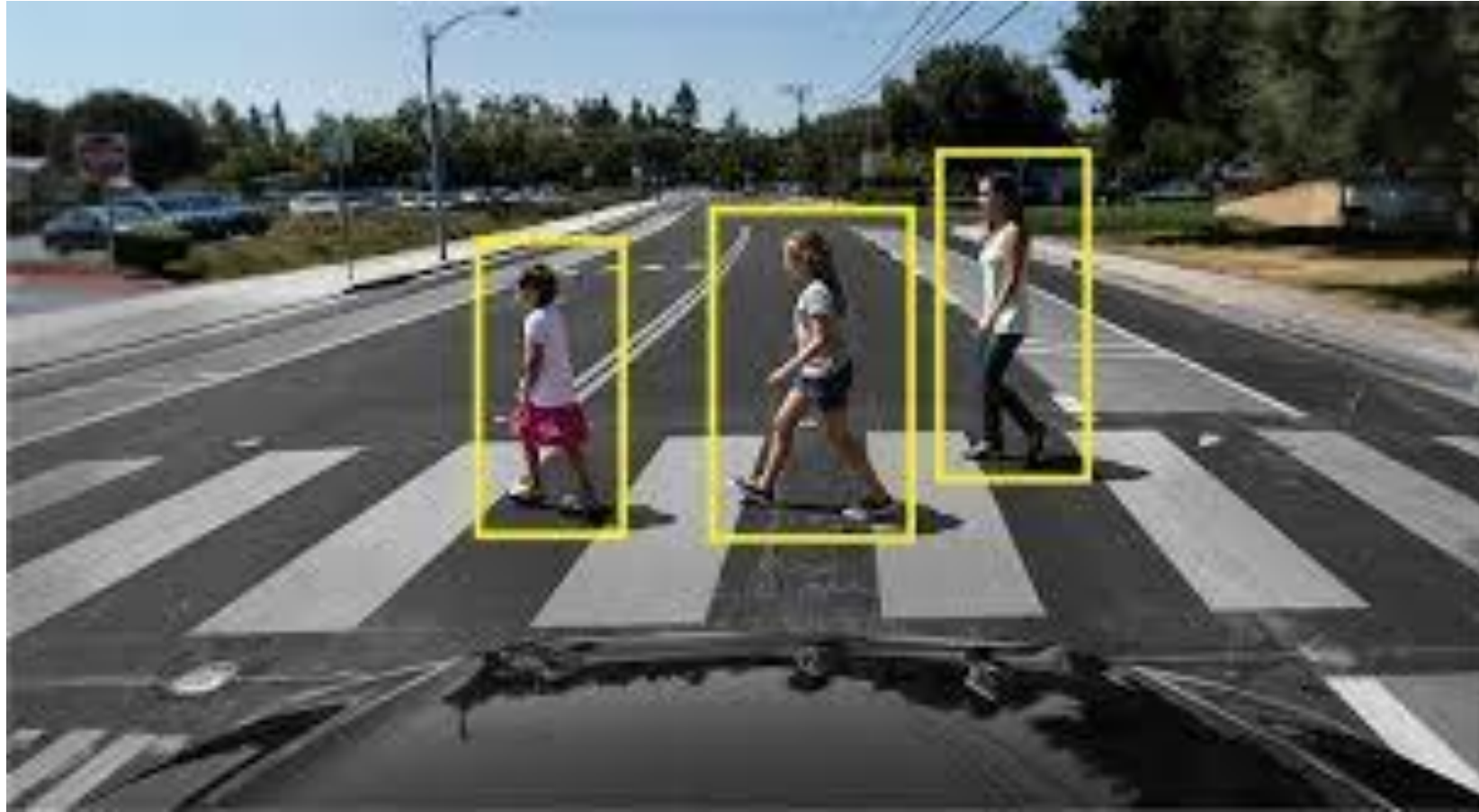
# VEHICLE DETECTION







# PEDESTRIAN DETECTION





## REFERENCE



- <https://www.youtube.com/watch?v=qD-axktFWt0&t=82s>