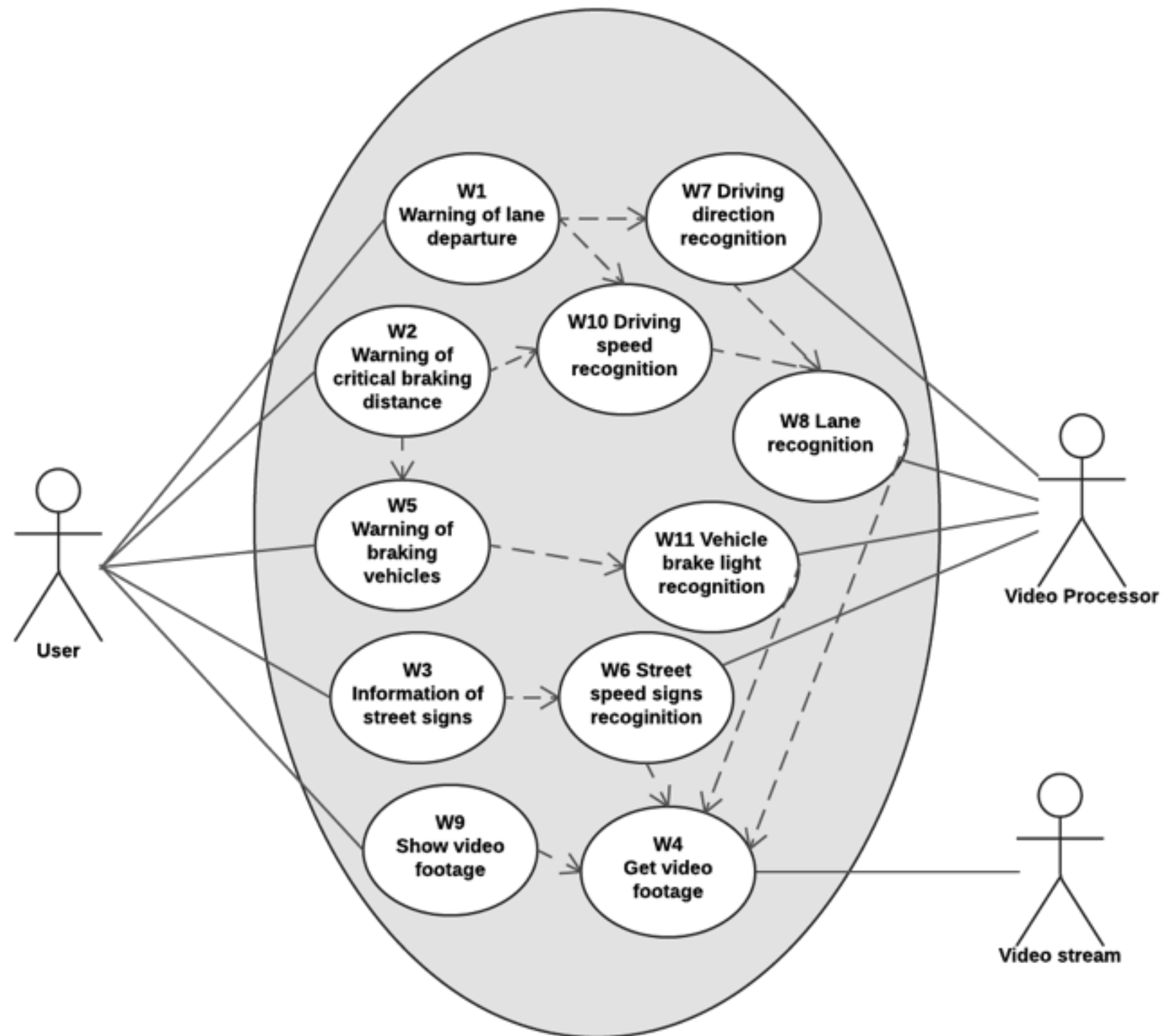




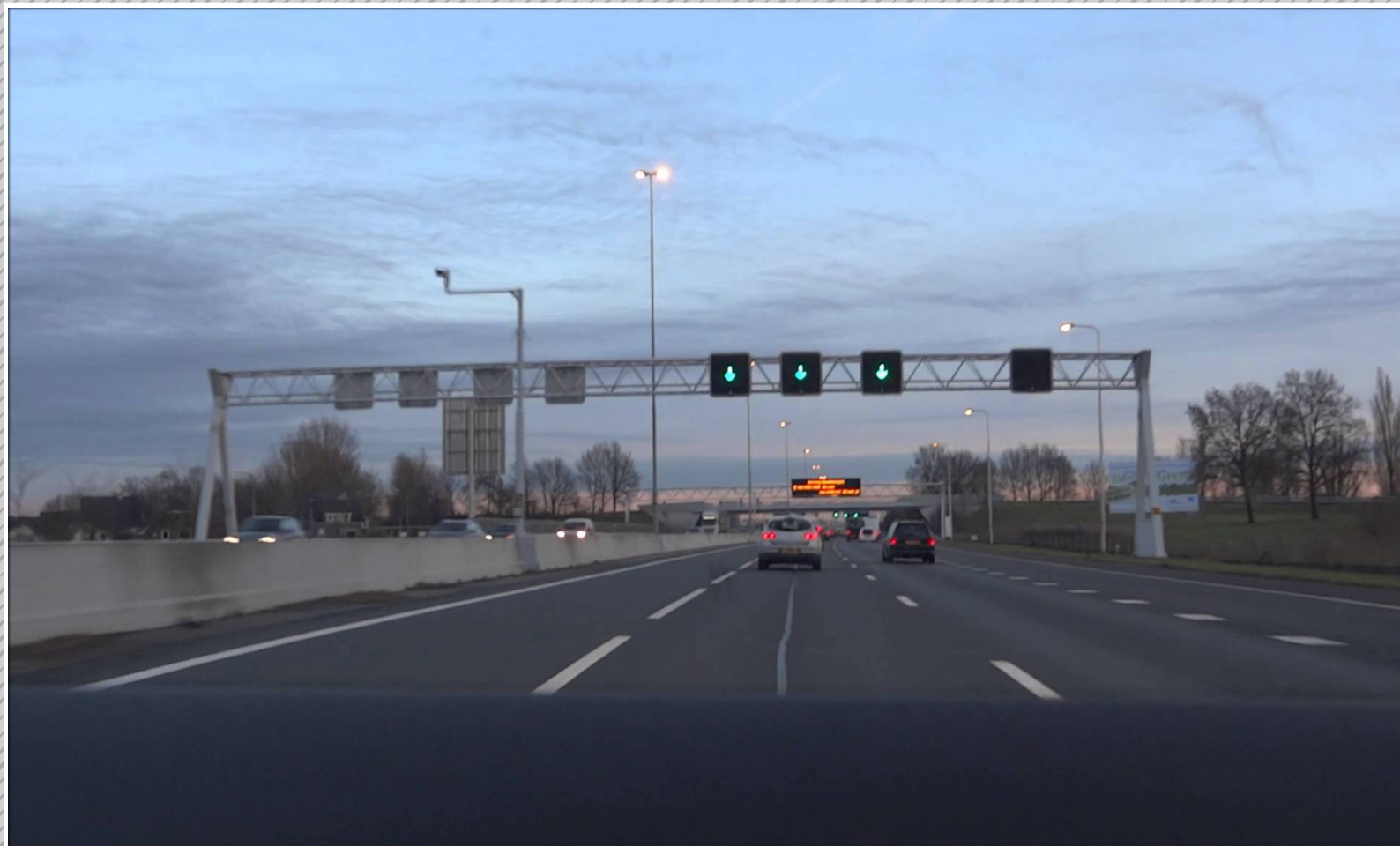
A.D.A.M.

Requirements

# Use case overview



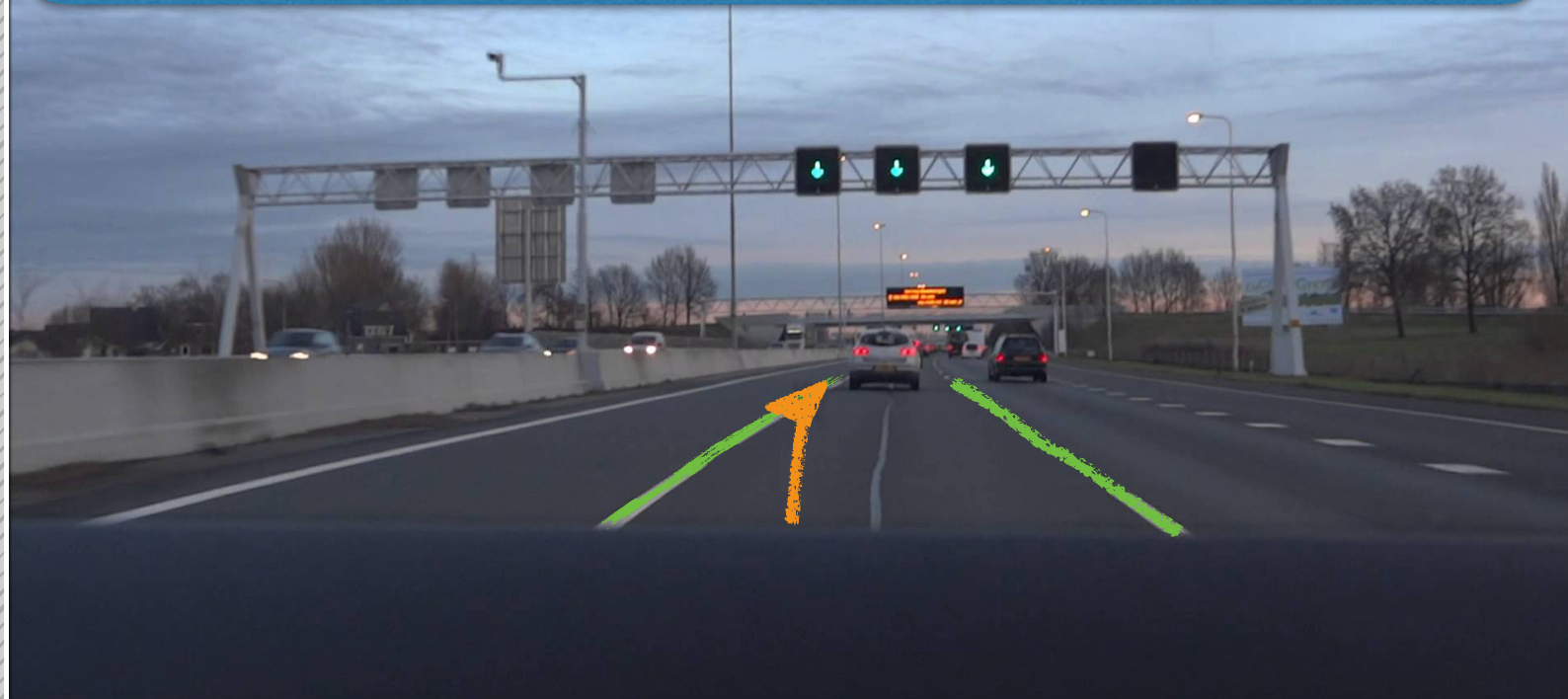
# W9 Show video footage



# W1 Warning of lane departure



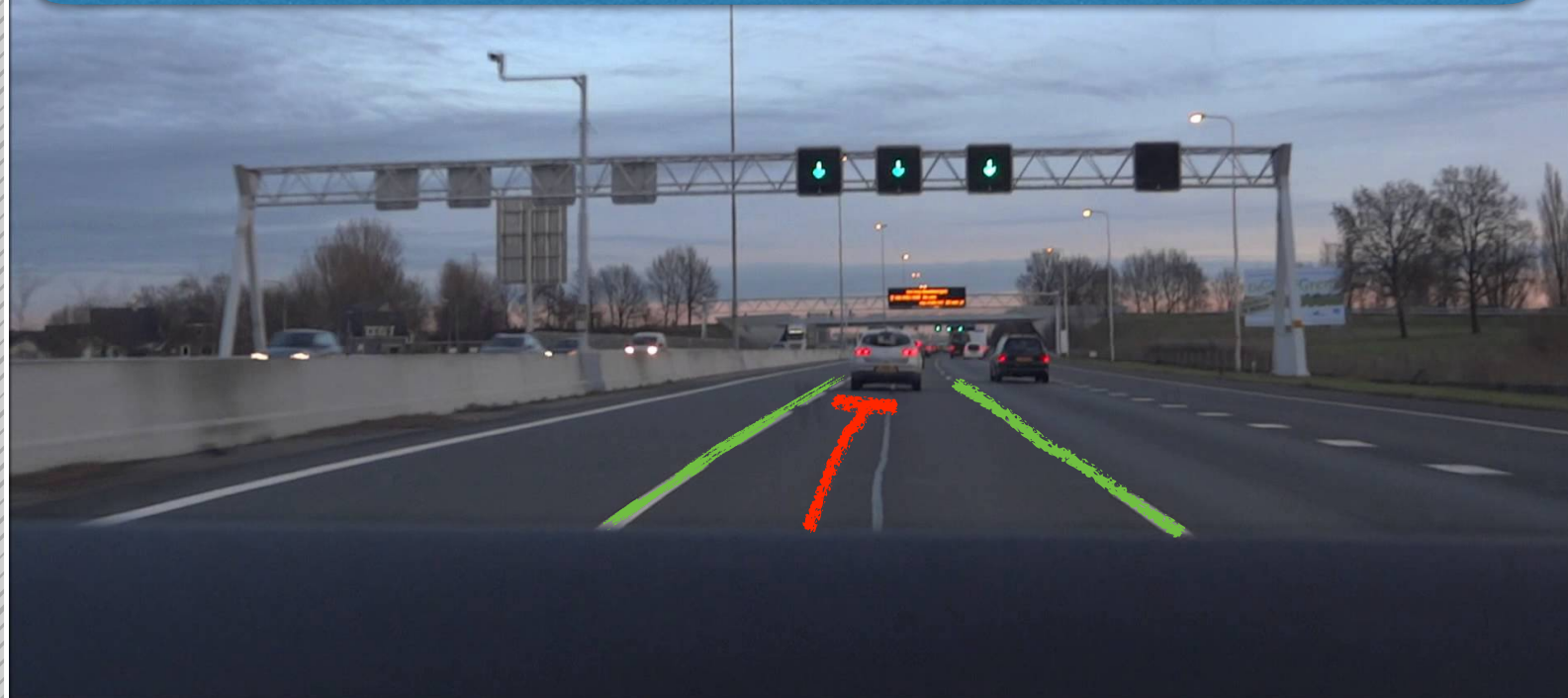
Lane change imminent



# W2 Warning of critical braking distance

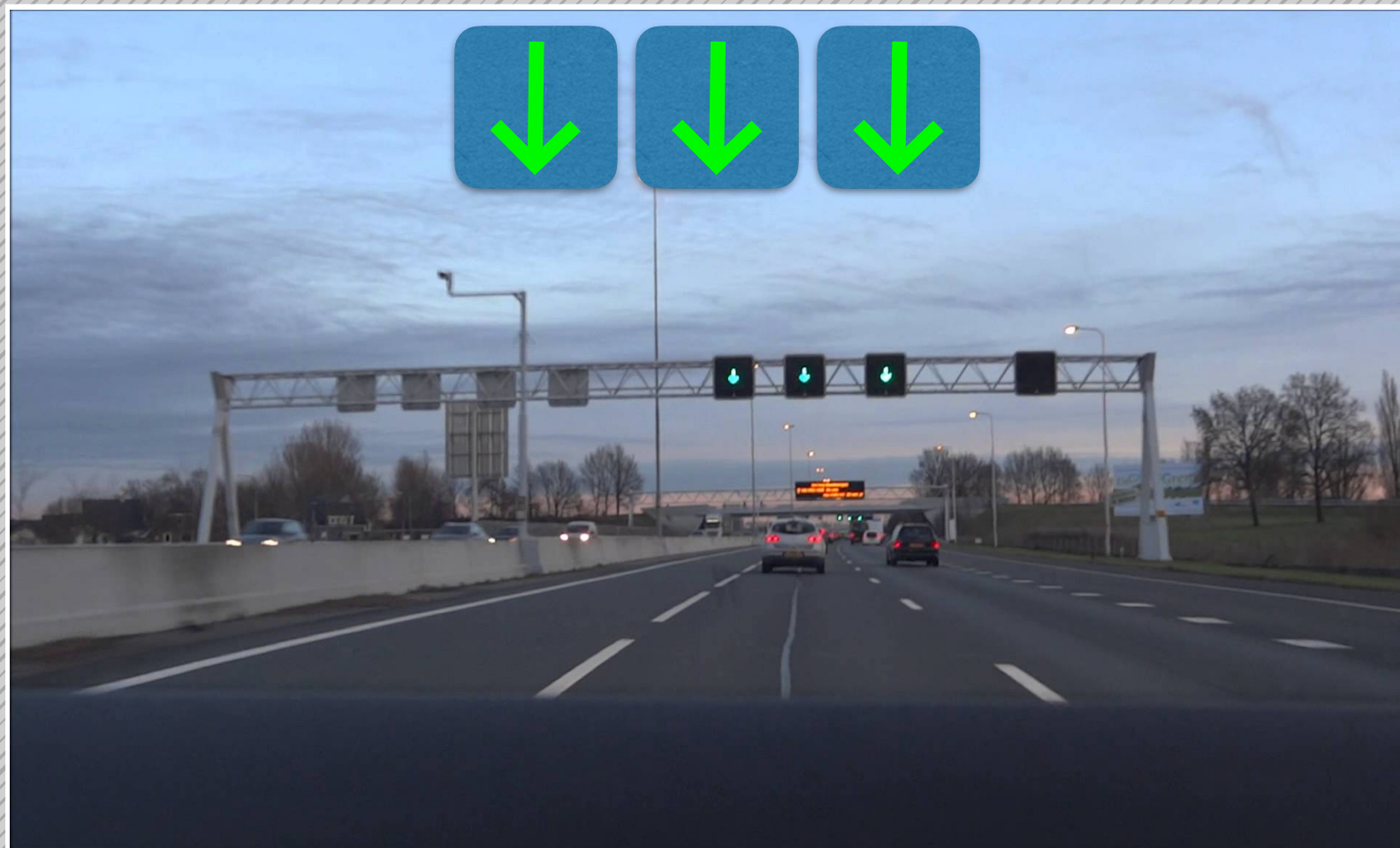


Slow down!  
You are about to hit another car...





# W3 Information of street signs



# Non-functional requirements

- The solution should run on a commodity Android device with at least 4 CPU cores and a GPU with OpenGL ES 2.x support, support OpenCV runtime, at least 512 MB RAM, back-facing camera with at least FullHD resolution, sustainable charging (run on power-source with battery charging)
- The solution should run in almost real-time (no longer than the average human reaction time taken into account) to detect objects/situations
- The system shall not record any data and must withdraw video footage after processing
- No car signs should be disclosed and any detected signs should be blurred while showing the captured video
- The system shall not show any results if the given standard deviation of its confidence is more than 2 sigma and the confidence is below 75%.
- The solution requires a steady power connection to bridge longer driving sessions