

This data set describes the scenario that a vehicle wants to overtake its front one.

As shown below, there are three vehicles.



The bike (vehicle1) is riding slowly on the right lane and a police car (vehicle3) wants to overtake it. At the mean time, another car (vehicle2) from the opposite side is approaching on the left lane.

You need to implement what has been mentioned in the assignment description: “When a vehicle is planning to change lane, it sends a request for video to the vehicle staying in front of it, and also the vehicles coming from the other direction. Video streams are sent back to the requester and played back simultaneously.”

The file overview.webm shows the hold story. The videos from the vehicles are given in vehicle1.avi, vehicle2.avi, and vehicle3.avi, separately. You need

to use these video files to simulate real-time webcams in front of the vehicles. The location information of each vehicle is given in the corresponding json files. Inside the json file, each line is a valid json string and contains 1) “world_ts”: the UTC timestamp and 2) “location”: the geo-location in a virtual coordination. The videos are captured with 10 frames per second. The first timestamp corresponds to the time of taking the first frame of the video. You can use these data to calculate the vehicle’s real-time location on each frame.