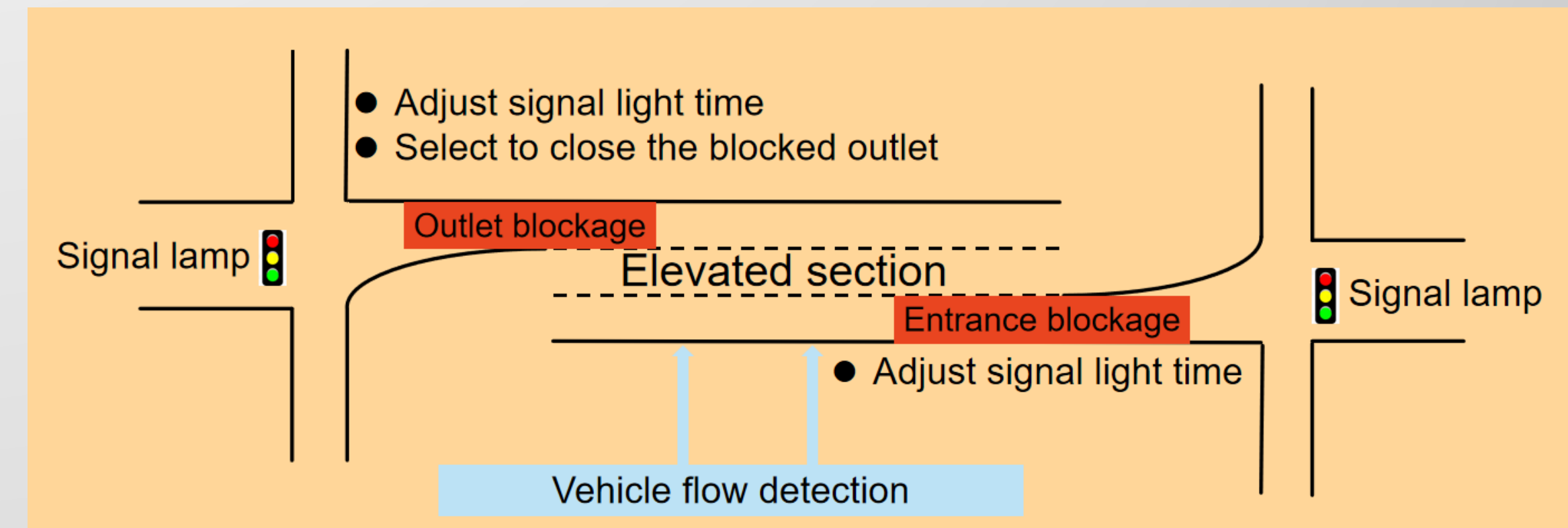


# Speed up of Elevated access : Team: Spring

## Overview

In order to solve the problem of serious congestion in certain sections or periods of time in some areas, a scheme combining UC-win/road software and related technologies of vehicle flow detection is proposed to simulate the real situation of congestion in the viaduct entrance and exit.

## Project Goal



## Project Architecture

**UC-win/Road**  
3次元リアルタイムバーチャルリアリティ

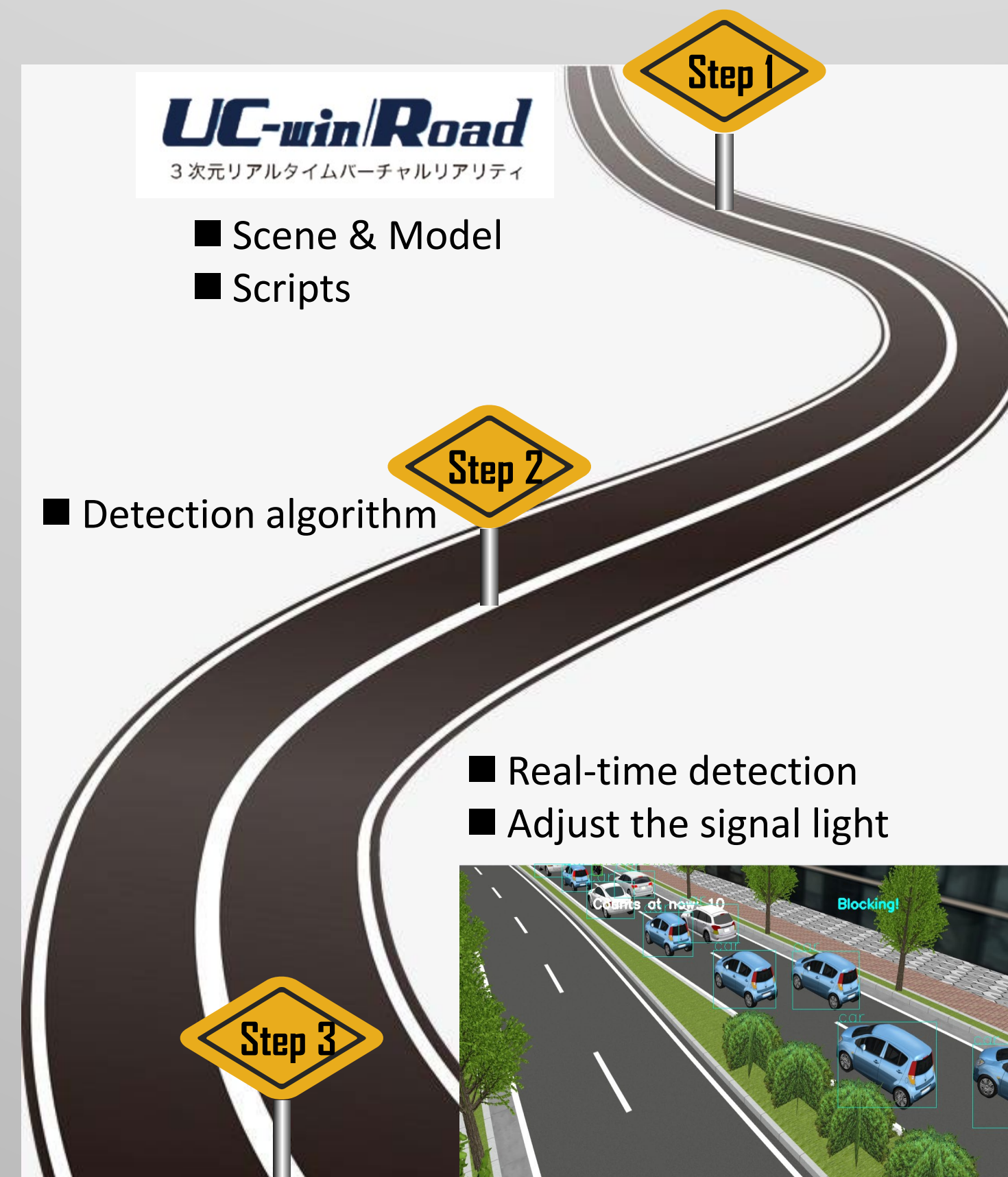
**Making scene and simulation model**



**Object Detection using Deep learning**

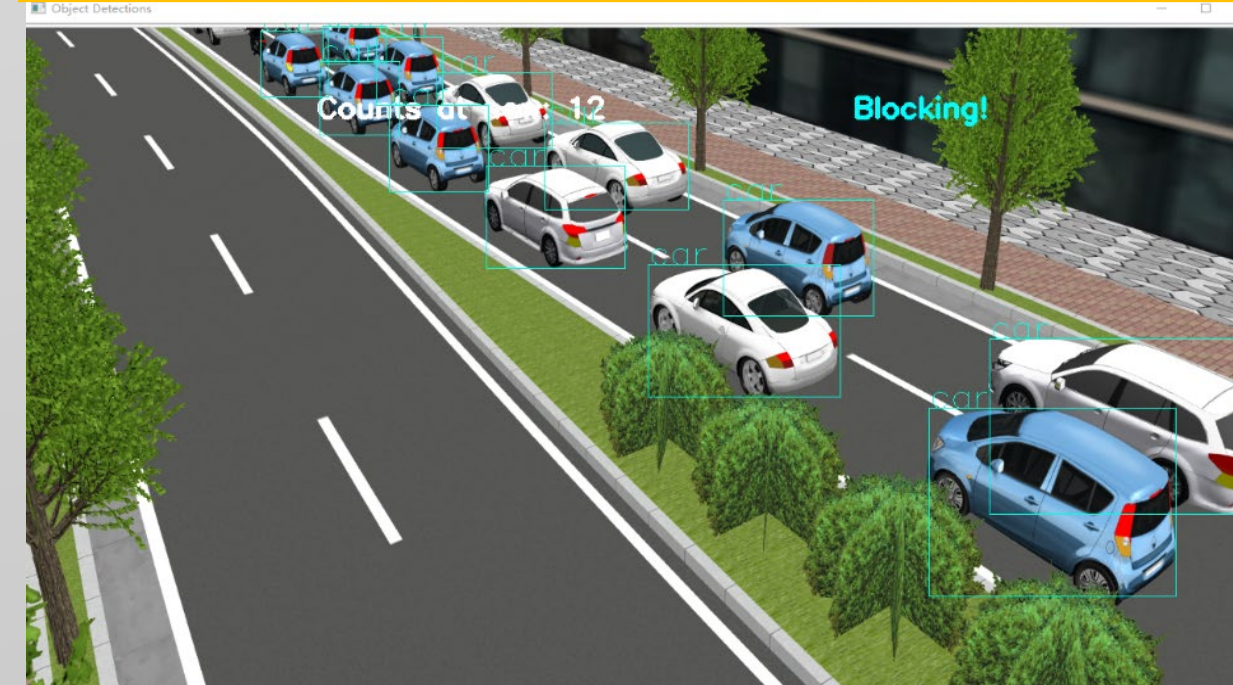
OpenCV, DEEP LEARNING, YOLO V4, python

## Flow Chart

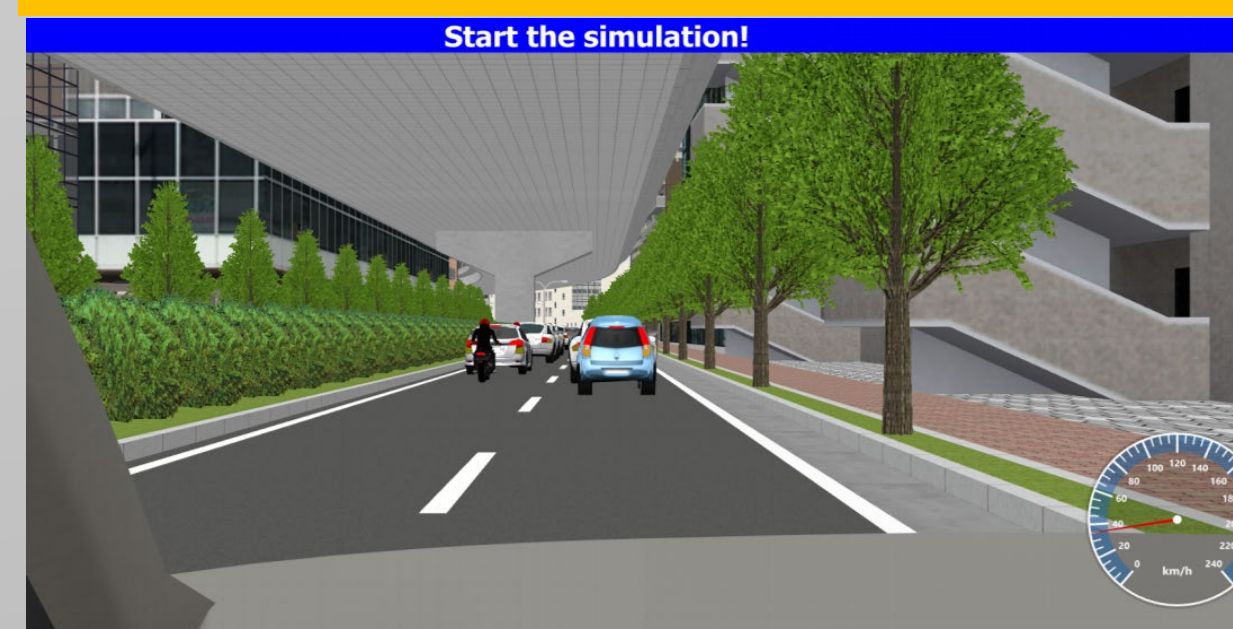


## Results

### Real Time Object Detection



### Scene Simulation



## Future work

For this project, we have two more tasks for the future:

- The big data technology is used to predict when the overhead entrance and exit will be blocked. According to the prediction results, the signal lamp time can be adjusted in real time and reasonably.
- From the perspective of regional linkage, the dynamic planning of all roads in the region is not only to adjust a certain intersection, but to adjust all intersections in the region as a whole.