

## Test Plan Description

### 1. Overall Test Plan Strategies.

We will use several different types of tests to ensure the high recognition rate and fast recognition speed of our project. For example, we will use black box testing to see if our project performs normal and output correct result. We will also perform functional tests to ensure that the user interface follows the technical specifications document. We will use abnormal and boundary tests to make sure the program is reliable. Will have performance tests to make sure the performance meet requirement.

### 2. Test Case Description

#### 4.1 Performance.

4.2 This test will ensure the program can finish processing complexed video and return result within required time.

4.3 For the following input, count the processing time and verify the time is not longer than the required time:

- The traffic sign in video is blurry but can be recognized by our program.
- There are some disturbance objects around the traffic sign and the sign can be recognized.
- shorten the present time of traffic sign in the video

4.4 Input: video that record complexed situations.

4.5 Output: program can finish processing and return result within required time.

4.6 Boundary

4.7 Blackbox

4.8 performance test

4.9 integration

### 3. Test Case Matrix

Test Case ID	Normal/Ab.	Black/Whitebox	Functional/Perform	Unit/Integer
4	Boundary	Blackbox	performance	Integer