

## ANNOTATION INSTRUCTION PROTOCOL

When watching a video clip, please annotate details regarding the driver's behaviour, the actions he/she takes, and any road information you can add. Use the following points to annotate effectively, and mark your answers in the table below.

The driver:

1. Does the driver fully stop at the stop sign?
2. Does he/she simply slow down?
3. Does he/she slow at all?
4. If the driver stop, does he stop with reason? i.e. ensures it's safe to go?
5. Can you rank the driver's recklessness from 1 to 10? (10 being very reckless)
6. Does the video contain a car accident?
7. If yes, is it related to the stop sign?

The stop sign:

8. Can you clearly see the stop sign?
9. Can you see 2 stop signs on each side of the road?
10. Can you see more than 2 stop signs? How many?
11. Can you see anything which has a potential to obstruct the stop sign?

The road:

12. If you saw more than 2 signs, can you describe the intersection?
13. Is there anything in the road which might affect the flow of traffic? i.e. road works?

Annotation table

Question	Annotation	Notes
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		

## ASSUMPTIONS AND MODEL SUPPORT

### Assumptions

- The video is clear with high enough resolution.
- There is a stop sign in the video.
- The car is moving.
- It is during daytime, and if not, and it affects the visibility, the annotator will note it in question 8.
- The annotators only annotate what they see and not what is supposed to be done by the driver.
- The annotators don't understand machine learning.

### Model Training support

Since the annotators are not machine learning experts, the format of this document would have to allow them to annotate the video easily, while we can take this document and create labels which we can input into the training model. For example, instead of explicitly asking them to write down exactly a label for if the driver stops at the stop sign, I decided to have 3 separate questions for if he/she stops, slows down, or doesn't slow at all. Since only one of those can be true, this creates a categorical feature with 3 classes. Another feature was added for recklessness and is ranked from 1-10. Although this is subjective, it's still worth noting down.

The features gained in this annotation support model training as they give a different data insight towards the events which have a potential to increase the likelihood of a collision. It creates a more diverse model that can accept a richer data.