

General Guidelines

- Annotate only what is clearly visible — avoid guessing.
- Use tight, accurate bounding boxes with minimal padding.
- Do not annotate occluded or partially visible stop signs or objects unless clearly recognizable.
- Focus on consistency, not perfection.
- If unsure, leave internal notes (if your platform supports it), but avoid speculative tagging.

1. Stop Sign

- Identify and annotate stop signs in the video using bounding boxes.
- Draw a tight box around the stop sign in every frame where it is clearly and unobstructedly visible.
- If the driver comes to a complete stop (approximately 1 second) while the stop sign is visible, apply the special tag `stop_sign_at_full_stop` .

Stop Sign Tags:

- `stop_sign_visible` (implied with bounding box)
- `stop_sign_at_full_stop` - use only if the vehicle comes to a full stop while the sign is in view.

2. Collision Object and Collision Type Tagging

- **If a collision occurs:**
- Identify the object involved.
- Draw a bounding box around the object at the moment of impact and in subsequent visible frames.
- Only annotate the actual impacted object, not nearby or speculative objects.
- Choose the appropriate tag for the type of object involved.

Collision Type Tags:

- collision_with_vehicle
- collision_with_wall
- collision_with_pole
- collision_with_fence
- collision_with_road_edge (e.g., sidewalk or curb)
- collision_with_unknown_object (if not clearly identifiable)

3. Intersection Type Tagging

- Observe the road layout where the stop sign is located.
- Based on visible structure, tag the type of intersection.
- Use judgment, tag only what is visually supported.

Intersection Type Tags:

- four_way_intersection - classic cross intersection
- t_intersection - road ending at a perpendicular junction
- y_intersection - three-way fork or angled split
- roundabout_entry - circular intersection
- single_road_stop - no visible intersecting road (before a merge or crosswalk)

4. Driver Behavior Classification

- Based on visual behavior, classify how the driver interacts with the stop sign.
- Tag both the type of stop behavior and the outcome.

Stop Behavior Tags:

- full_stop - vehicle halts completely (approximately 1 second)
- rolling_stop - slows down but does not fully stop
- no_stop - no visible attempt to stop

Outcome Tags:

- safe_passage - vehicle continues without incident
- post_stop_collision - any collision following stop or pass through

5. General Video Outcome

- Each video clip must be assigned an overall outcome label to summarize the end result of the driver's interaction with the stop sign and surrounding environment.

General Outcome Tags:

- collision - The video includes a clear collision event involving the vehicle
- normal - No collision occurs, the driver proceeds safely through or after the stop sign interaction.

My way of thinking when I constructed the Annotation Protocol Design:

I started with assuming the way the data is annotated visually was by the traditional way of Bounding Boxes (BBs). Then I started thinking about the visual data that is extractable from the video. The Stop Sign Bounding Box + stop_sign_at_full_stop Tag, including a bounding box for every visible stop sign allows us to train accurate object detection models. The stop_sign_at_full_stop tag that I chose to add, in my eyes, is valuable because it provides clear, steady visual frames of the stop sign, maximizing the quality of the positive training signal (if possible and visible of course). This visual data helps differentiate between "blurred pass by" signs and moments of true driver compliance. I added the Collision Object Annotation and Type Tagging because tagging the type of object involved in a collision improves the semantic of the training data. It allows the model to not only detect collision events but also understand their context, was a vehicle involved? or did it strike a stationary object? bounding the object makes it possible to correlate collision dynamics with specific environmental features, improving visual behavior prediction. The Intersection Type Tagging is the road structure around the stop sign (like 4 way vs T junction) I believe it affects driver decisions. By labeling intersection types, we enable the model to generalize across scenarios and learn how behavior may vary based on traffic patterns and layout. it is important for visual only models which rely on context cues to infer scenery correlation in general.

And lastly Driver Behavior Tags I added those tags because they offer a behavioral signal based solely on visual evidence. distinguishing between full stops, rolling

stops, and no stops allows the model to learn regulatory compliance. pairing behavior with outcomes such as collisions or normal signals creates valuable supervised data for predicting driving and reaction patterns. I added General Outcome since I saw this is the data structure in the example data of the task and felt it had a value.