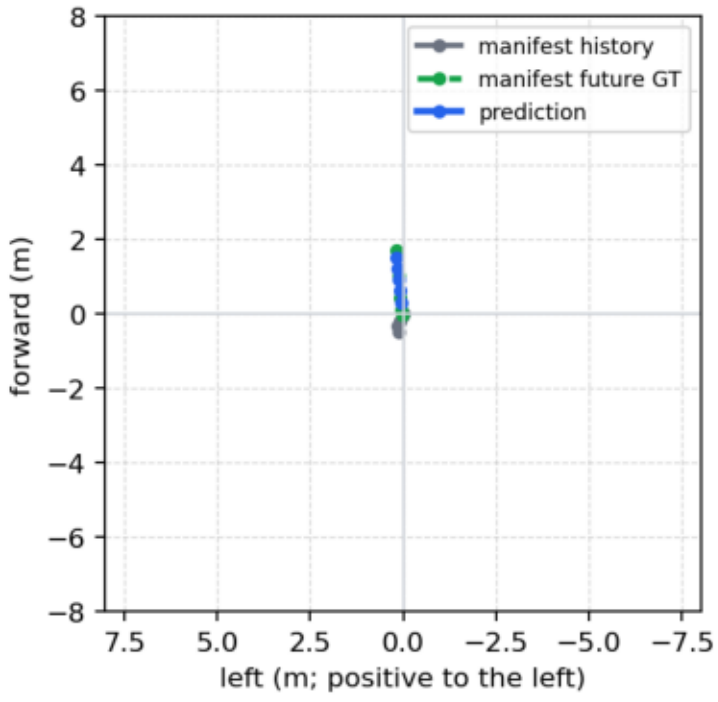
t=-5s | t=-1s | 267 | t=+1s | t=+5s





Student Prediction

ANALYSIS
Prediction: The pedestrian in the foreground (id 0) is moving laterally to the right and will likely clear the robot's immediate path within the next second. The white car (id 1) is moving forward and will pass the robot on the left. The blue car (id 2) is stationary or moving slowly in the intersection.

Navigation Goal: The goal position [1.695, 0.192] indicates a forward movement with a slight leftward adjustment. The robot needs to navigate through the intersection while avoiding the pedestrian crossing from the right and the vehicle passing on the left.

Feasible Area: The feasible space is the wet road surface directly ahead, bounded by the white car on the left and the pedestrian/blue car on the right. The path requires careful timing to pass between these obstacles.

Rules: The traffic light is green, allowing forward movement. However, the wet road conditions and pedestrian activity necessitate a cautious, slow approach.

Collision Risks: The primary risk is colliding with the pedestrian (id 0) who is currently in the immediate foreground. Secondary risks include the white car (id 1) passing closely on the left and the blue car (id 2) if it moves unexpectedly.

RATIONALE
The robot should execute a 'slow_forward' maneuver. It must wait for the pedestrian (id 0) to clear the path to the right before accelerating slightly. Once the path is clear, the robot should proceed forward, maintaining a safe distance from the white car on the left and the blue car on the right, aiming for the goal position while accounting for the slippery road surface.

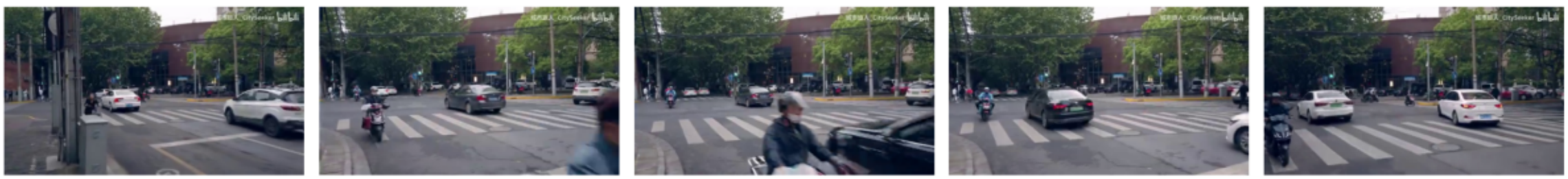
Teacher Reflection

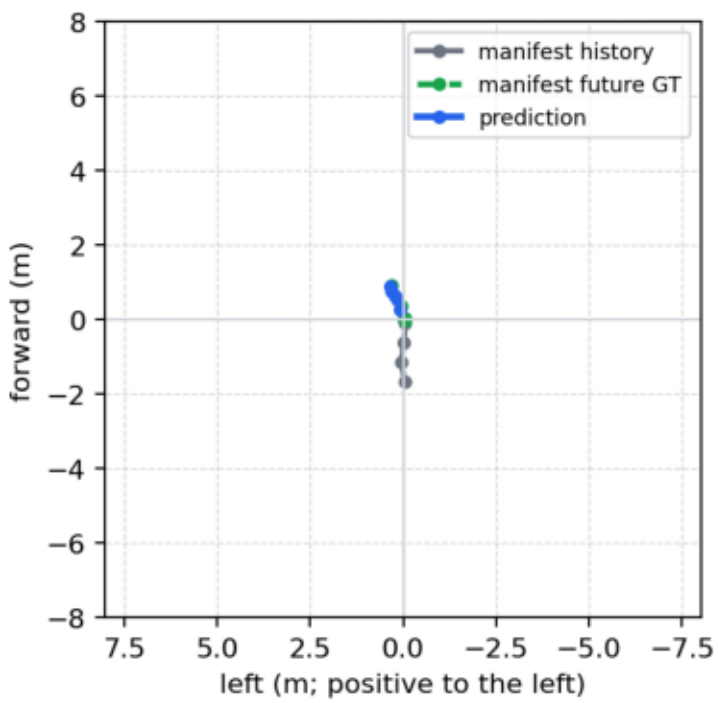
ANALYSIS REFLECTION
Prediction: The prediction that the pedestrian (id 0) is moving laterally to the right is incorrect. The historical trajectory shows the pedestrian moving forward (increasing x) and slightly left (increasing y), away from the robot's path, rather than crossing it laterally.
Navigation Goal: No clear issue.
Feasible Area: No clear issue.
Rules: No clear issue.
Collision Risks: The assessment of the pedestrian as the primary collision risk is incorrect. Since the pedestrian is moving away from the robot's path (forward and left), the risk is minimal. The primary risk is actually the white car (id 1) passing closely on the left and the general congestion.

PLANNING REFLECTION
Rationale: The rationale to 'wait for the pedestrian to clear the path to the right' is flawed because the pedestrian is not blocking the path to the right; they are moving away. The robot should proceed forward cautiously, primarily monitoring the white car on the left and the general flow of traffic, rather than waiting for a non-existent obstruction.

CORRECTION
Analysis: The pedestrian in the foreground is moving forward and slightly left, clearing the immediate path. The white car is passing on the left. The path ahead is open but requires caution due to wet conditions and surrounding traffic.
Planning: Execute a 'slow_forward' maneuver. Do not wait for the pedestrian as they are not an obstruction. Proceed forward while maintaining a safe distance from the white car on the left and monitoring the blue car and other pedestrians on the right.
Trajectory: The predicted trajectory is acceptable as it moves forward, but the reasoning should not imply waiting for the pedestrian. The trajectory should smoothly navigate forward, avoiding the white car on the left.

t=-5s | t=-1s | 309 | t=+1s | t=+5s





Student Prediction

ANALYSIS
Prediction: The scooter rider in the foreground is moving laterally across the robot's path from right to left. Based on their trajectory, they will pass directly in front of the robot within the next second. The traffic light remains green, allowing cross-traffic to proceed.

Navigation Goal: The goal position [0.909, 0.32] is located forward and slightly to the left. However, the immediate path is blocked by the crossing scooter. The robot must wait for the scooter to clear the path before proceeding towards the goal.

Feasible Area: The immediate feasible area is the space behind the scooter rider. Once the scooter passes, the space directly ahead and slightly left becomes accessible for navigation.

Rules: The traffic light is green for the cross street, meaning the robot does not have the right of way to proceed immediately. The robot must yield to the crossing traffic.

Collision Risks: The primary collision risk is the scooter rider crossing directly in front of the robot. Proceeding forward now would result in a collision. Secondary risks include other potential cross-traffic or pedestrians at the intersection.

RATIONALE
The robot should execute a 'stop' action. The scooter rider is currently occupying the robot's direct path and will not clear it quickly enough to safely proceed. Stopping allows the scooter to pass safely. Once the path is clear, the robot can then accelerate towards the goal position.

Teacher Reflection

ANALYSIS REFLECTION
Prediction: The prediction that the scooter rider is moving from right to left is incorrect. The historical trajectory shows the robot moving forward (x increasing from -1.68 to -0.105), and the scooter rider appears to be moving towards the camera (forward in the scene) and slightly to the robot's left, not laterally across the path from right to left.
Navigation Goal: No clear issue.
Feasible Area: No clear issue.
Rules: No clear issue.
Collision Risks: The collision risk assessment is flawed because it is based on the incorrect prediction of the scooter's trajectory. The scooter is approaching the robot's position, not crossing laterally.

PLANNING REFLECTION
Rationale: The rationale to stop is correct, but the justification is based on the incorrect lateral crossing prediction. The robot should stop because the scooter is approaching its immediate path and the intersection is active with cross-traffic.

CORRECTION
Analysis: The scooter rider is approaching the robot from the intersection, moving towards the camera and slightly to the left. The robot is moving forward towards the intersection. The immediate path is blocked by the approaching scooter and active cross-traffic.
Planning: The robot should stop to yield to the approaching scooter and ensure the intersection is clear before proceeding.
Trajectory: The robot should remain stationary or move very slowly while waiting for the scooter to pass.