

Input



Lidar



Map



Camera



Radar



IMU/GPS

Data Process



BEV Scene
Generator

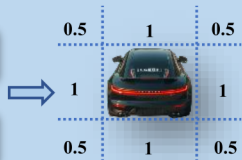


t-SNE Scenario Embedding

Risk
Analyzer

Spatial Metrics:
Distance to Collision

Temporal Metrics:
Time to Collision



Weights Map



Risk Score

NuRisk VQA



Word Cloud



<Sequential images>
What is the risk level of Agent <ID>?

Risk Score is <0-5>.



Chain of Thought

Step 1: Relative Position

Step 2: Relative Velocity

Step 3: Spatial Metrics

Step 4: Temporal Metrics

Step 5: Weighted Score

VQA Format

Outcome



Risk Evaluation



Benchmarking



Fine-Tuning



Safety-Critical
Scenarios