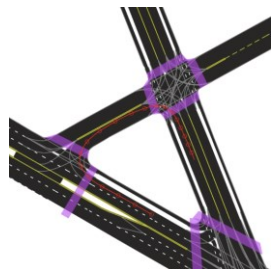


Input

Object Detection



HD Map

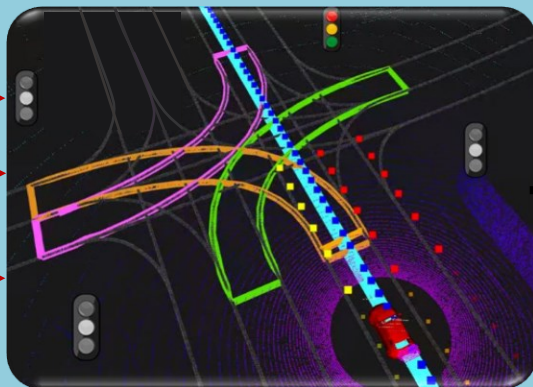


Ego-vehicle status



SmartMOT

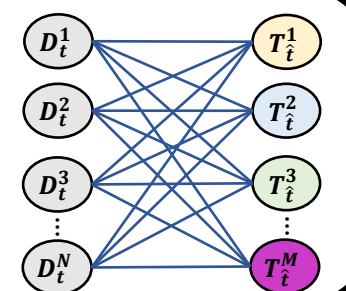
Monitored Lanes-based Attention Module



(1) Most relevant
Detections
 D_t

(2) State Prediction
 $T_{\hat{t}}$

(3) Data Association



$\{T, D\}_{matched}$

(4) State Update

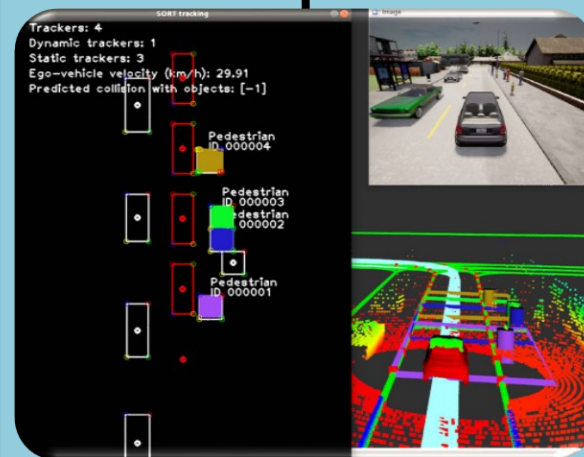
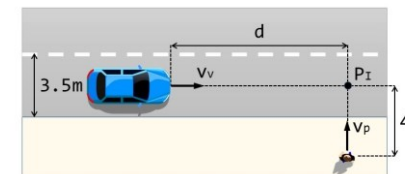
BEV Kalman Filter

Matched Trackers

Birth & Death
Memory

$\{T, D\}_{unmatched}$

Use Cases & Collision evaluation



CTRV
prediction