

$$t = t_{n-2} \qquad t = t_{n-1}$$

state of the surrounding vehicle i:

$$\mathbf{S_i}(t) = (d_{\text{node},i}(t), v_i(t), a_i(t))$$

$$TTC = \frac{d_{\text{node},i}(t)}{v_i(t)}$$

the node

$$t = t_n$$

$$t = t_{n-1}$$

$$t = t_{n-2}$$

 $d_{\text{node},i}(t)$ 

 $t = t_n$ 

Surrounding Vehicle