

Acronyms

ADAS Advanced Driver Assistance System.

DRAC Deceleration Rate to Avoid Crash.

FAR False Alarm Rate.

R-CNN Regional-Convolutional Neural Network.

TTC Time to Collision.

Glossary

Detection Rate

$$\frac{TP}{TP + FN}$$

Synonomous with Sensitivity and True Positive Rate.. , *synonomous with Sensitivity*

False Positive

$$\frac{FP}{FP + TN}$$

Floating Car Data Floating car data (FCD) in traffic engineering and management is typically timestamped geo-localization and speed data directly collected by moving vehicles, in contrast to traditional traffic data collected at a fixed location by a stationary device or observer..

Loop Detector A buried wire loop with a magnetic field that the vehicle going overhead disrupts, detecting the car. Does not detect pedestrians or animals..

Macroscopic Traffic Variables Variables related to traffic, like intensity, density, and speed.. , *see* Microscopic Traffic Variables

Microscopic Traffic Variables Variables related to an individual driver, like speed, time, distance headway, time headway, vehicle type.. , *see* Macroscopic Traffic Variables

Sensitivity

$$\frac{TP}{TP + FN}$$

Synonomous with Detection Rate and True Positive Rate.. , *synonomous with True Positive Rate*

Specificity

$$\frac{TN}{TN + FP}$$

. , *synonomous with* True Negative Rate

Traffic Oscillation The traffic oscillation is an important feature of traffic flow. It refers to the phenomenon that instead of maintaining a comfortable and stable driving status, vehicles are often forced to repeatedly accelerate and decelerate..

True Negative Rate

$$\frac{TN}{TN + FP}$$

. , *synonomous with* Specificity

True Positive Rate

$$\frac{TP}{TP + FN}$$

Synonomous with Sensitivity and Detection Rate.. , *synonomous with* Sensitivity