GLOSSARY OF TERMS

Acc Accuracy

AdaBoost Adaptive Boosting

AI Artificial Intelligence

APs Access Points

ATO Automatic Train Operation

ATP Automatic Train Protection

ATS Automatic Train Supervision

CBI Computer-based Interlocking

CBTC Communications Based Train Control

CART Classification and Regression Trees

CIA Confidentiality, Integrity, Availability

CNN Convolutional Neural Network

DBSCAN Density-Based Spatial Clustering of Applications with Noise

DCS Data Communication System

Eclat Equivalence Class Clustering and Bottom-Up Lattice Traversal

FP False Positive

FN False Negative

GSM-R Global System for Mobile Communications - Railway

ICT Information and Communication Technology

ICSs Industrial Control Systems

IDS Intrusion Detection System

ID3 Iterative Dichotomiser 3

ITS Intelligent Transport Systems

IoT Internet of Things

Fit Just-Right-Fit

LASSO Least Absolute Shrinkage and Selection Operator

LDA Linear Discriminant Analysis

LMA Limits of Movement Authority

LTE-R Long Term Evolution - Railway

LVQ Learning Vector Quantization

Light GBM Light Gradient Boosting Machine

MDS Misbehavior Detection Systems

ML Machine Learning

MitM Man-in-the-Middle

OCC Operation Control Center

PCA Principal Component Analysis

Pre Precision

Rec Recall

RBFN Radial Basis Function Network

RF Random Forest

SMOTE Synthetic Minority Over-sampling Technique

SOM Self-Organizing Map

SVM Support Vector Machine

TP True Positive

TN True Negative

TSMSet Trian Status Message Dataset

T2G Train-to-Ground Communication

T2T Train-to-Train Communication

VOBC Vehicle On-Board Controller/Computer

V2I Vehicle-to-Infrastructure Communication

V2V Vehicle-to-Vehicle Communication

XGBoost Extreme Gradient Boosting

WiFi Wireless Fidelity

WOMSet Wayside Operational Message Dataset

WSU Wayside Unit

W2T Wayside-to-Train

kNN k-Nearest Neighbours