

GLOSSARY OF TERMS

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|-----------------|---|
| <i>Acc</i> | <i>Accuracy</i> |
| <i>AdaBoost</i> | <i>Adaptive Boosting</i> |
| <i>AI</i> | <i>Artificial Intelligence</i> |
| <i>APs</i> | <i>Access Points</i> |
| <i>ATO</i> | <i>Automatic Train Operation</i> |
| <i>ATP</i> | <i>Automatic Train Protection</i> |
| <i>ATS</i> | <i>Automatic Train Supervision</i> |
| <i>CBI</i> | <i>Computer-based Interlocking</i> |
| <i>CBTC</i> | <i>Communications Based Train Control</i> |
| <i>CART</i> | <i>Classification and Regression Trees</i> |
| <i>CIA</i> | <i>Confidentiality, Integrity, Availability</i> |
| <i>CNN</i> | <i>Convolutional Neural Network</i> |
| <i>DBSCAN</i> | <i>Density-Based Spatial Clustering of Applications with Noise</i> |
| <i>DCS</i> | <i>Data Communication System</i> |
| <i>Eclat</i> | <i>Equivalence Class Clustering and Bottom-Up Lattice Traversal</i> |
| <i>FP</i> | <i>False Positive</i> |
| <i>FN</i> | <i>False Negative</i> |
| <i>GSM-R</i> | <i>Global System for Mobile Communications - Railway</i> |
| <i>ICT</i> | <i>Information and Communication Technology</i> |
| <i>ICSs</i> | <i>Industrial Control Systems</i> |
| <i>IDS</i> | <i>Intrusion Detection System</i> |
| <i>ID3</i> | <i>Iterative Dichotomiser 3</i> |
| <i>ITS</i> | <i>Intelligent Transport Systems</i> |
| <i>IoT</i> | <i>Internet of Things</i> |
| <i>Fit</i> | <i>Just-Right-Fit</i> |
| <i>LASSO</i> | <i>Least Absolute Shrinkage and Selection Operator</i> |
| <i>LDA</i> | <i>Linear Discriminant Analysis</i> |
| <i>LMA</i> | <i>Limits of Movement Authority</i> |

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|-----------------|---|
| <i>LTE-R</i> | <i>Long Term Evolution - Railway</i> |
| <i>LVQ</i> | <i>Learning Vector Quantization</i> |
| <i>LightGBM</i> | <i>Light Gradient Boosting Machine</i> |
| <i>MDS</i> | <i>Misbehavior Detection Systems</i> |
| <i>ML</i> | <i>Machine Learning</i> |
| <i>MitM</i> | <i>Man-in-the-Middle</i> |
| <i>OCC</i> | <i>Operation Control Center</i> |
| <i>PCA</i> | <i>Principal Component Analysis</i> |
| <i>Pre</i> | <i>Precision</i> |
| <i>Rec</i> | <i>Recall</i> |
| <i>RBFN</i> | <i>Radial Basis Function Network</i> |
| <i>RF</i> | <i>Random Forest</i> |
| <i>SMOTE</i> | <i>Synthetic Minority Over-sampling Technique</i> |
| <i>SOM</i> | <i>Self-Organizing Map</i> |
| <i>SVM</i> | <i>Support Vector Machine</i> |
| <i>TP</i> | <i>True Positive</i> |
| <i>TN</i> | <i>True Negative</i> |
| <i>TSMSet</i> | <i>Trian Status Message Dataset</i> |
| <i>T2G</i> | <i>Train-to-Ground Communication</i> |
| <i>T2T</i> | <i>Train-to-Train Communication</i> |
| <i>VOBC</i> | <i>Vehicle On-Board Controller/Computer</i> |
| <i>V2I</i> | <i>Vehicle-to-Infrastructure Communication</i> |
| <i>V2V</i> | <i>Vehicle-to-Vehicle Communication</i> |
| <i>XGBoost</i> | <i>Extreme Gradient Boosting</i> |
| <i>WiFi</i> | <i>Wireless Fidelity</i> |
| <i>WOMSet</i> | <i>Wayside Operational Message Dataset</i> |
| <i>WSU</i> | <i>Wayside Unit</i> |
| <i>W2T</i> | <i>Wayside-to-Train</i> |
| <i>kNN</i> | <i>k-Nearest Neighbours</i> |