

DATE: 21 JULY 2025

DAY: MONDAY

DAY 22 – Machine Learning Dataset Preprocessing

LEARNING OBJECTIVES:-

- Prepare dataset for ML-based IoT intrusion detection.
- Perform cleaning, scaling, and feature extraction.

Overview:-

Day 22 introduced dataset preprocessing for training ML models on IoT traffic data. The day covered removing missing values, normalizing features, and selecting relevant parameters for classification.

Activities:-

- Loaded dataset and cleaned null values.
- Normalized features and extracted ML-ready columns.

Insights:-

- Understood need for balanced training data.
- Learned importance of feature engineering in model accuracy.