Maximo Work Order Anonymized Dataset

Prepared by: Kyle Willhide

Course: INSY 7120 - Data Mining

University: Auburn University

Date: May 5, 2025

Maximo Work Order Anonymized Dataset

Dataset Description

This dataset consists of anonymized maintenance work order data exported from a Maximo CMMS used in a manufacturing environment. Each row represents a single work order including information about downtime, failures, personnel involved, and operating conditions.

All identifying information has been anonymized to preserve confidentiality. This dataset is intended for academic purposes, including data mining, clustering, and reliability analysis.

Feature Descriptions

WONUM

Anonymized work order number.

ASSETNUM

Anonymized identifier for the asset involved.

LINE

Anonymized production line or location.

HNATOTALDT

Total downtime recorded for the work order (in minutes).

HNACOMMODITY

Anonymized machine commodity group.

FAILURECODE

General classification of the failure.

PROBLEM_CODE

Specific problem code reported.

CAUSE_CODE

Identified root cause of the failure.

REMEDY_CODE

Action or repair taken to resolve the issue.

LEAD

Anonymized team lead for the work order.

SUPERVISOR

Anonymized supervisor responsible.

LABOR_COUNT

Number of labor personnel involved.

LABORHOURS

Total labor hours logged.

dt<=5

Binary indicator: 1 if downtime <= 5 minutes, 0 otherwise.

SHIFT

Shift during which the work order was created.

CREW

Crew assigned to the task.

DATE

Date of downtime event in the format YYYY-MM-DD

WEEKDAYNUM

Day of the week (1=Sunday, 7=Saturday).

ISWEEKEND

Binary indicator: 1 if weekend, 0 otherwise.

Anonymization Notes

Sensitive fields such as asset numbers, work order numbers, production lines, and personnel names have been anonymized using a random unique mapping strategy. Each original value was replaced with a synthetic label (e.g., ASSET_001, WONUM_042) to preserve dataset structure and relationships for analysis.

No real names, locations, or proprietary codes remain in this dataset.