

Task Overview:

The candidate will work with a real-world industrial dataset to build an anomaly detection model for manufacturing sensor data.

Objective:

You are provided with real industrial machine sensor data.

Your task is to develop a system that can automatically detect anomalies in the sensor readings - potentially indicating early signs of machine failure or abnormal operations.

The focus should be on data understanding, anomaly detection methodology, and business relevance.

Dataset Details:

Name: AICD Manufacturing Dataset ([AICD Dataset](#))

Source: Kaggle

Target column: 'Alarm.ItemDroppedError'

Deliverables (from the Candidate):

1. Data Exploration
2. Anomaly Detection Model
3. Model evaluation
4. Business interpretation
5. Final Submission
 - A) Jupiter Notebook or Python scripts
 - B) Summary Report or Slide Deck (PDF)