

ELECTRCICAL FAULT CLASSIFICATION AND DETECTION

The data report for `the dataset sourced from kaggle kernels output anil656/fault-detection-classification -p /path/to/dest` includes the following key information:

- The dataset contains 4 entries and 4 columns.
 - The columns are 'fault_indicator', 'feature1', 'feature2_Y', and 'feature2_Z'.
1. The data types of the columns are as follows:
 - 'fault_indicator': int32
 - 'feature1': int64
 - 'feature2_Y': float64
 - 'feature2_Z': float64
 2. Summary statistics for the numerical columns:
 - 'fault_indicator': Mean = 0.75, Std = 0.957, Min = 0, Max = 2
 - 'feature1': Mean = 25, Std = 12.91, Min = 10, Max = 40
 - 'feature2_Y': Mean = 0.25, Std = 0.5, Min = 0, Max = 1
 - 'feature2_Z': Mean = 0.25, Std = 0.5, Min = 0, Max = 1

There are no duplicated entries in the dataset.

3. Unique values in each column:
 - 'fault_indicator':
 - 'feature1':
 - 'feature2_Y': [0.0, 1.0]
 - 'feature2_Z': [0.0, 1.0]

The dataset has been transformed with new features 'new_feature' and 'binned_feature1'. 'binned_feature1' has been created by binning 'feature1' into categories 'Low', 'Medium', and 'High'.

The 'fault_indicator' column has been one-hot encoded into 'fault_indicator_0', 'fault_indicator_1', and 'fault_indicator_2' columns.

This data report provides a comprehensive overview of the dataset, including key statistics, data types, unique values, and transformations applied to the features.