

CM1

Preprocessing steps:

1. Standardization

- It takes the points roughly in the same scale on both features and handles the squashing.
- Handles the outliers more effectively as compared to other normalization methods.

2. Removing Outliers

Since there are lot of outliers in columns line Active, Case_fatalities_ratio using IQR to remove outliers leads to significant data loss. Hence, z-score was chosen instead.

Additional things done differently from assignment 2

3. Converting target labels to categorical form

- As we are using softmax as an activation function for the output layer in default network as well as in new designed network. Converting the confirmed, deaths and recovered labels into categorical form.
- The denominator of the softmax function is normalized term that ensures the output of the function values between 0 and 1.
- After converting into categorical one-hot encoding is done because softmax activation function is highly preferred for categorical and multiclass classification.