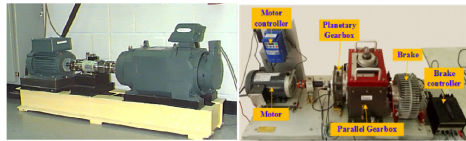


Equipment failure



Fault vibration signal collection



Signal normalization

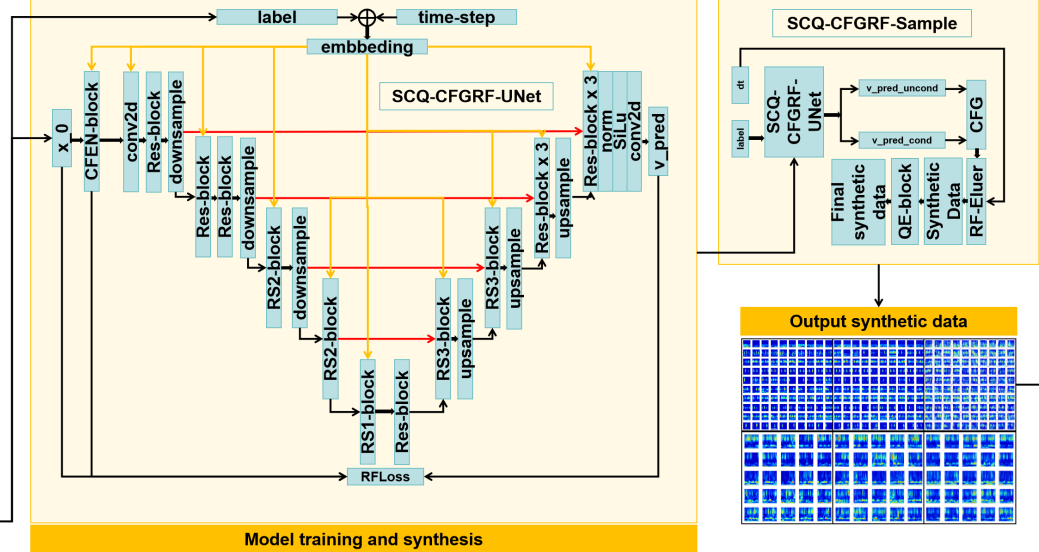
Sliding Window Slicing

Divide the training set and test set

Constructing imbalanced datasets of different proportions

Data processing stage

Training and Synthesis of Generative Models



Data synthesis stage

Synthetic Data Quality Assessment

Dataset Balancing

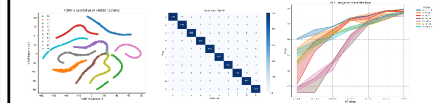
Training the classifier

VGG-16

VGG-13

VGG-11

Classifier Test Evaluation



Data evaluation stage