

Vibration Analysis

How to interpret vibration data?

Which information can be obtained by a vibration signal?

Signal Processing

Extracting information from vibration signals

Fourier Transform

Rich information with high computational cost

Digital Filters

Simple information with low computational cost

Data Clustering

Handling operational variability

KMeans

Segregating datapoints into clusters of similarity

PCA: Principal Component Analysis

*Dimensionality reduction:
2D visualization of clustering results
- what do the clusters mean?*

Anomaly Detection

Is everything "normal" or is there something off?

MVGD: Multi-Variate Gaussian Distribution

How "normal" is the current state of the machine?