

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?*