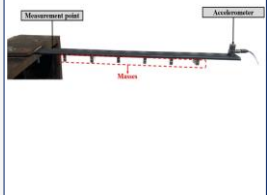


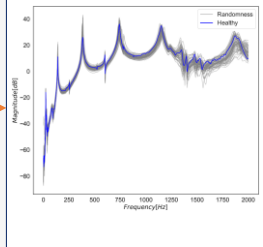
## Data acquisition

## Unsupervised

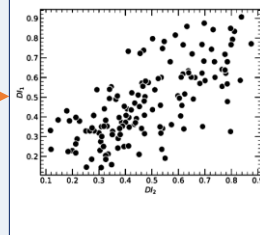
### 1. Monitored Structure



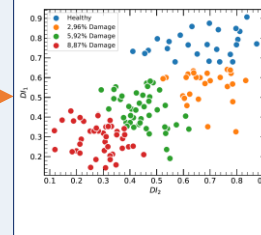
### 2. Preprocessing



### 3. Feature Selection



### 4. Data Groups or Clusters



### 5. Split Data

Training

Test

## Decision Making

## Supervised

### Damage Detection

#### 7. Model Evaluation

Evaluation

#### 6. ML Classifiers

SVM  
KNN  
DT  
RF  
NB  
XGBosst

### Damage Quantification

#### 7. Model Evaluation

Evaluation

#### 6. ML Regression

SVR  
(Support Vector  
Regression)

#### 8. Final Model

Healthy

Damage

#### 8. Final Model

Estimated  
Damage

