

# cnn vs plswavelets

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## 1 Introduction

## 2 Methodology

### 2.1 Preprocessing/Feature transformation

#### 2.1.1 Chemometric approaches

#### 2.1.2 Wavelets

### 2.2 Models

#### 2.2.1 Partial Least Squares (PLS)

#### 2.2.2 interval-PLS (i-PLS)

#### 2.2.3 LASSO

#### 2.2.4 Convolutional Neural Network (CNN)

### 2.3 Interpretability

## 3 Case studies

### 3.1 Beer dataset

### 3.2 Used oils

## 4 Results

## 5 Discussion

## 6 Conclusions