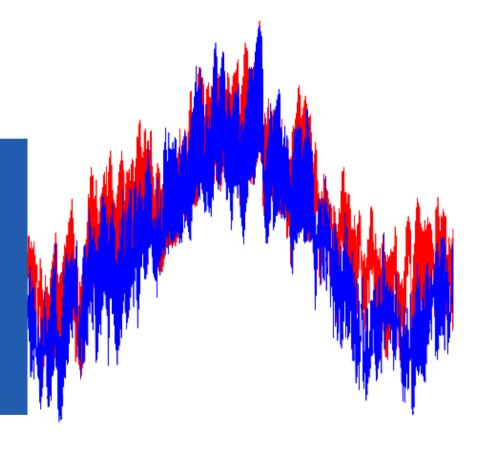
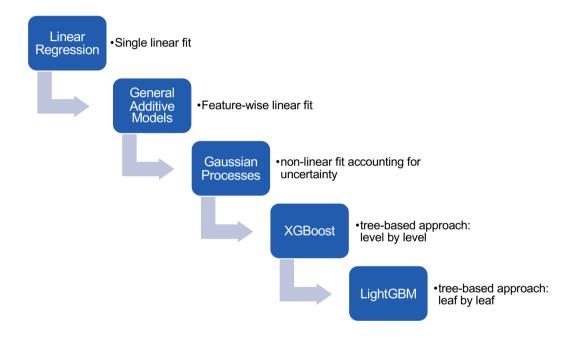


**Alpiq Challenge** 



## **Model Selection**





#### Feature Engineering & Data Imputation

# **Feature Engineering**

- Binary encoding common off-days holidays + weekends
- Solar Photovoltaic
- Temperature
- Past Consumption  $C_{t-1h}$ ,  $C_{t-24h}$ ,  $C_{t-30days}$ ,  $C_{t-1year}$
- Past Fourier-transformed Consumption  $Fc_{t-1h}$ ,  $Fc_{t-14h}$ ,  $Fc_{t-30days}$ ,  $Fc_{t-1year}$

## **Data Imputation**

- Feed-forward fill
- Backward fill
- Nearest-neighbor imputation
- Mean value imputation

## Performance

• Improved roll-out predictions

