

Electricity Price Forecasting

Traditional Model vs Deep Learning

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G09

Data Collection

Table of Influence Factors

| Factor | Evidence | Data Source | Category |
|--------------------|--|--|----------|
| Fuel Costs | https://www.electricchoice.cc | Aktuelle Messwerte - short | short |
| Transmission Costs | https://www.electricchoice.cc | https://drive.google.com | short |
| Weather | https://www.electricchoice.cc | https://www.landwirtschaft.de | short |
| Renewable Energy | Forecasting Electricity Market | https://www.renewable-energy-world.com | long |
| Market Design | https://www.mdpi.com/2071-1050/10/1/10 | https://www.smard.de | long |
| Energy Consumption | Electricity pricing - Wikipedia | https://www.smard.de | long |
| Energy Generation | Electricity pricing - Wikipedia | https://www.smard.de | long |
| Corona and Vaccine | Impact on Electricity Market | COVID-19 Tracking Germany | short |
| Wind Onshore | Electricity pricing - Wikipedia | https://de.windfinder.com | long |

Data Sources



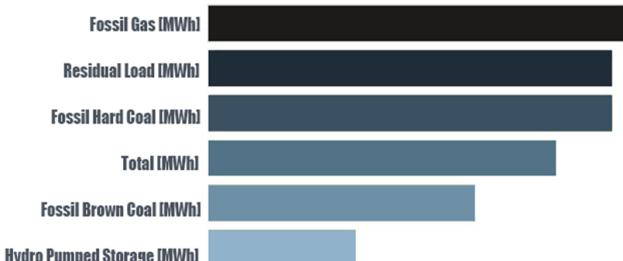
Stadt Leipzig



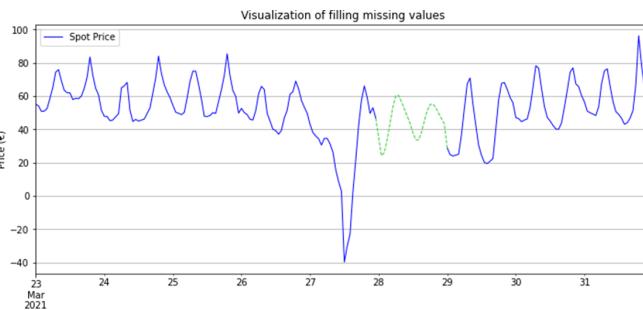
monTEL
statista
SACHSEN.DE

Exploratory Data Analysis

Feature Analysis (Spearman Correlation)

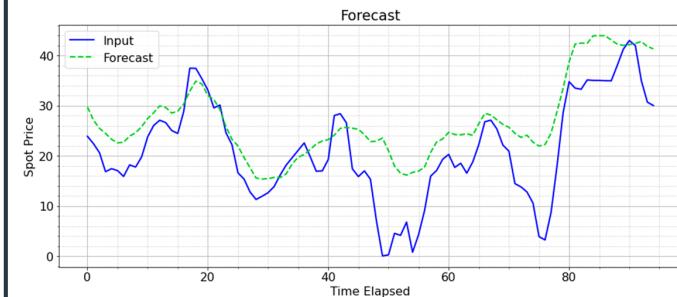


Missing Value Processing

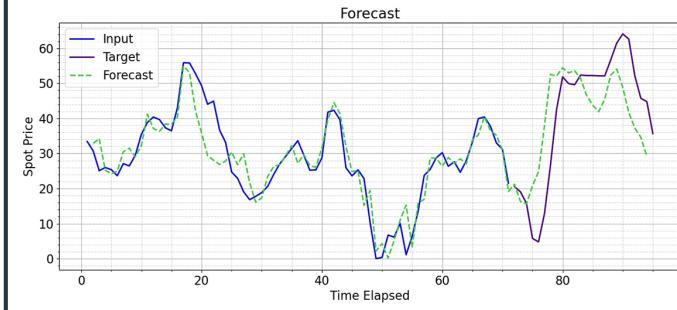


Demo Model

ARIMAX



Transformer



04. May - 15. June

15.June - 30.June

August