The role of forecasting electricity demand in societal decarbonization

A workshop on electricity forecasting research and practice with applications in Python

Instructor

Hussain Syed Kazmi
Electrical Energy Systems and Applications
KU LEUVEN

Register for free...

21 MARCH 2022

15.00–17.00 CET Time, 14.00–16.00 (London)

https://f4sgrn.netlify.app/

The role of forecasting electricity demand in societal decarbonization

A workshop on electricity forecasting research and practice with applications in Python

Who is the training for?

1. Anyone who is interested in electricity demand forecasting research and practice, from simple baseline methods to advanced machine learning techniques;

2. A decision maker who wants to learn how these forecasts can be used in decision making and the tradeoffs of modeling approaches;

3. An academic or graduate student that wants to expand their understanding of the state of the art with a hands-on session;

4. Practitioners in the field who are looking for ways to improve their data-driven forecasting.

Participants will be able to:

1. Identify modeling approaches and their use in practice;

2. Distinguish a diverse set of challenges in forecasting electricity demand at multiple scales and how these relate to decision making processes;

3. Recognize research directions and better identify numerous sources of open-source electricity datasets;

4. Leverage software for modeling, data acquisition and processing, and evaluation.

Prerequisites

1. Basic knowledge of Python or a high-level programming language.

2. Basic knowledge of statistics and statistical modeling.

https://f4sgrn.netlify.app/

Forecasting for
Since 2020
Social Good

The role of forecasting electricity demand in societal decarbonization

A workshop on electricity forecasting research and practice with applications in Python

Outline of the session:

1. This session will provide an overview of the critical role electricity demand forecasting is set to play in societal decarbonization. We will cover some of the core theory behind electricity demand forecasting, and results from recent competitions.

2. Using data at multiple aggregation levels (building, district, country) the session will be followed by a hands-on coding session, where we will show how to create and benchmark different types of electricity forecast algorithms.

Outline of the lab session:

The lab session is planned in the form of Jupyter notebooks (using Python)

1. Getting familiar with electricity demand data   **(15 minutes)**
2. Creating baseline forecasts using the Darts library   **(15 minutes)**
3. Creating regression models to predict electricity demand   **(15 minutes)**

Register for free...

21 MARCH 2022

15.00-17.00 CET Time, 14.00-16.00 (London)

https://f4sgrn.netlify.app/