TrønderEnergi: Reproducibility of deep transfer learning models for time-series forecasting

Problem description

TrønderEnergi is conducting research on both deep transfer learning models for time-series forecasting and reproducibility. Reproducibility is a challenge for many machine learning models. Deep learning models have specific challenges in this regard. No studies have been done on the reproducibility of transfer learning models for time-series data. Our research on reproducibility has been published at AAAI, AI Magazine, eScience and has been mentioned in Science and Morgenbladet.

Data

The research will be based on our work on wind forecasting and will use data from our wind parks. We have more than five years of data for several wind parks.

Challenges

Understand the limitations of deep transfer learning algorithms related to reproducibility.

Thesis information

The thesis could be written by one or two students (both informatics and computer science students).