

Abstract- Smart charging vid Arlandas parkering 2023

The purpose of this bachelor thesis was, together with the company Tvinn, to develop a smart charging system in python that accurately predicts the electrical prices in Sweden electrical zone SE3 seven days ahead of time with an hourly frequency.

The first objective was to acquire what parameters influence the electrical price in SE3, then continuously download all relevant historical data with API:s

and lastly choose an appropriate forecast model. The

final product that was constructed were two hybrid models that utilizes an XGBoost, Deep learning RigidCv algorithms. The models created did not achieve the

set up accuracy goal but is a good indicator as to how the price generally behaves on a daily basis.