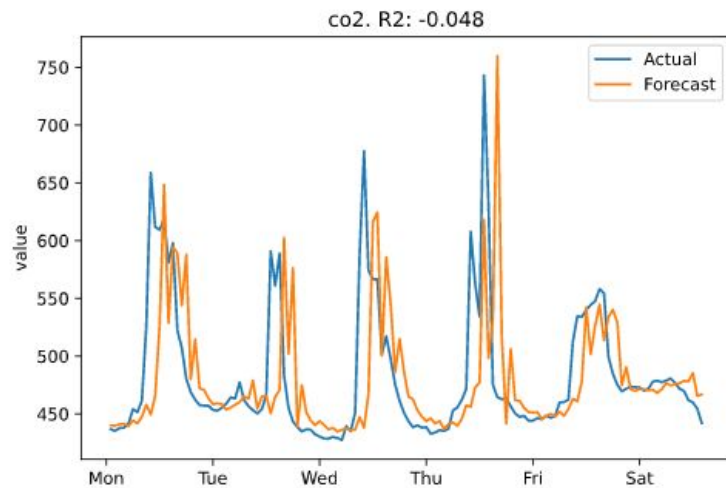




Oplevering #3

Model Experimenten & Iteratie op implementatie

Vorige meeting



CO2

442 ppm

D

W



Logs



Forecasts





Model Experimenten

- Data requirements; Google Calendar API
- Model experimenten;
 - korte termijn voorspellingen
 - lange termijn voorspellingen

Korte termijn model



Building and Environment

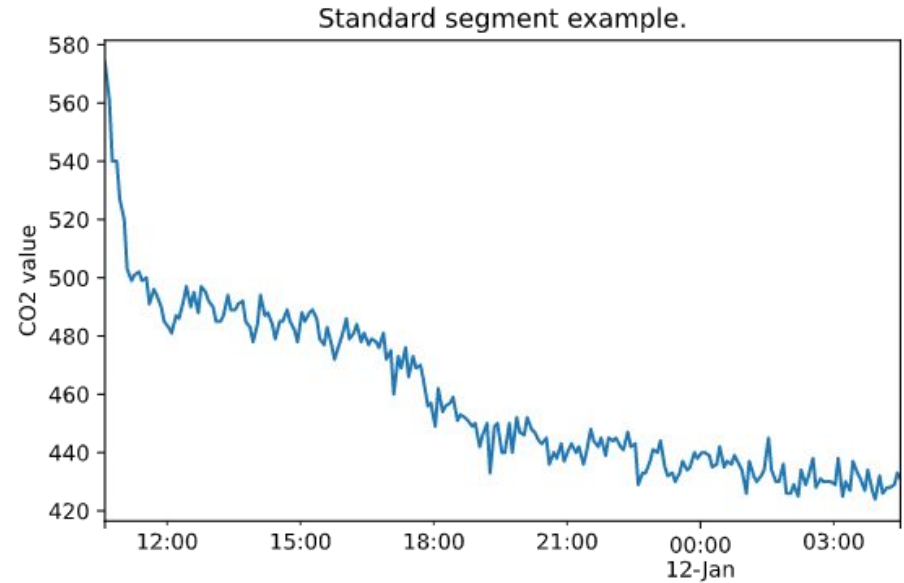
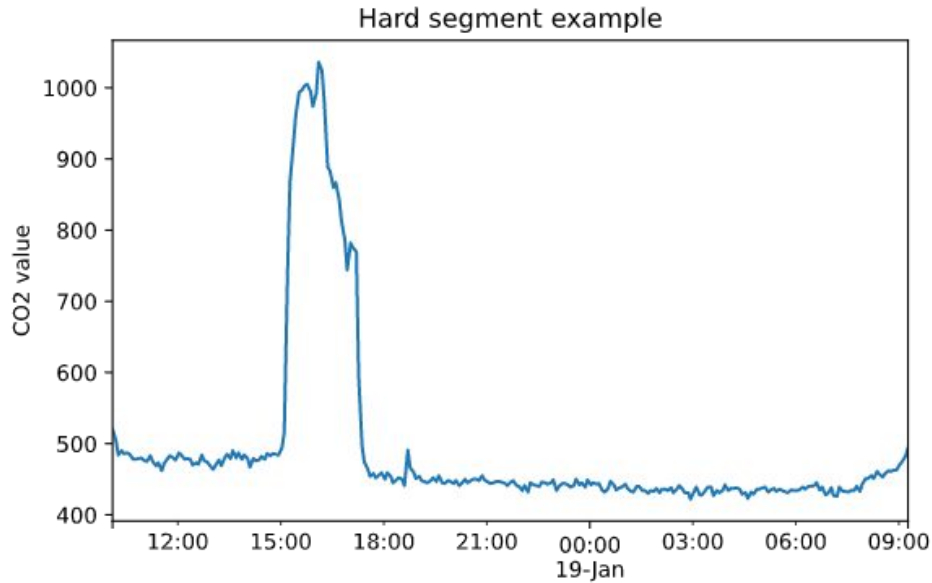
Volume 187, January 2021, 107409



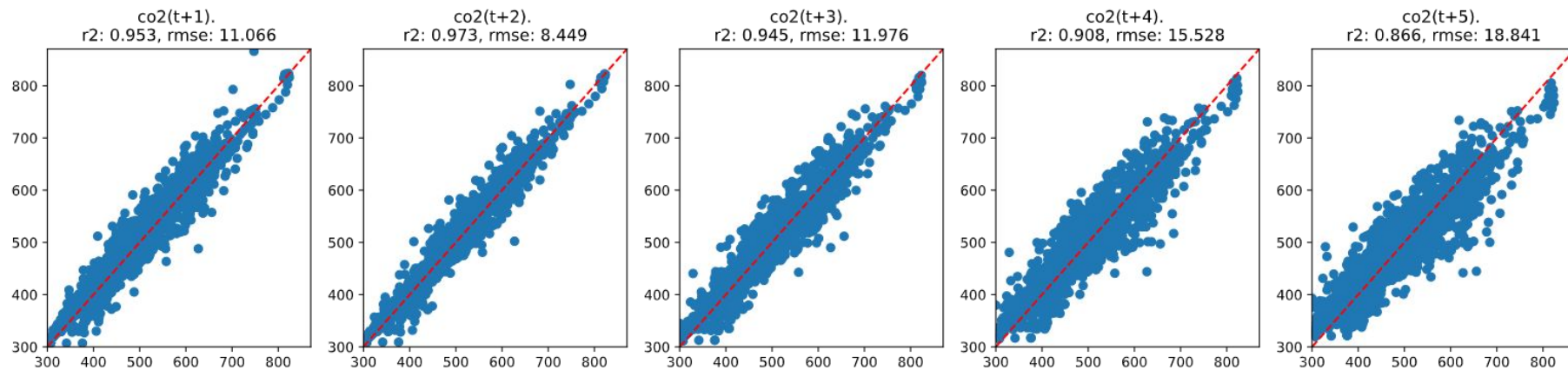
Forecasting office indoor CO₂ concentration using machine learning with a one-year dataset

Johanna Kallio ^a  , Jaakko Tervonen ^a , Pauli Räsänen ^a , Riku Mäkinen ^b , Jani Koivusaari ^a , Johannes Peltola ^a 

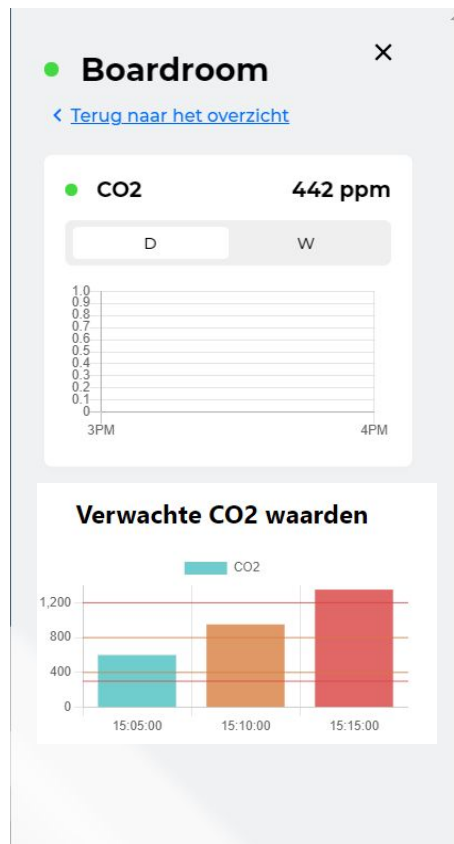
Korte termijn model - Probleemstelling



Oplossing - Ridge Regression

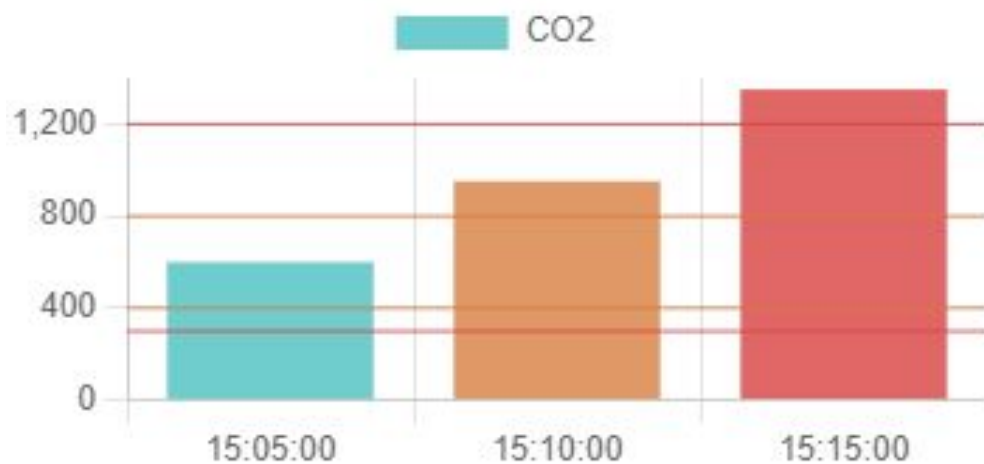


Implementatie





Verwachte CO2 waarden





Lange termijn model

The prediction of indoor air quality in office room using artificial neural network

Cite as: AIP Conference Proceedings **1977**, 020040 (2018); <https://doi.org/10.1063/1.5042896>
Published Online: 26 June 2018

Jouvan Chandra Pratama Putra, Safrilah, and Mohammad Ihsan



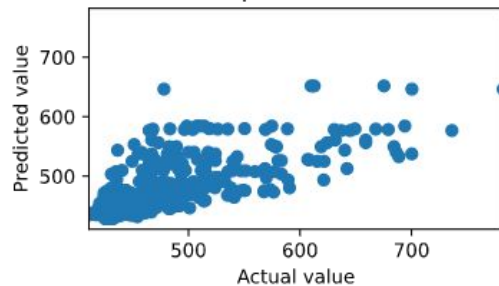
View Online



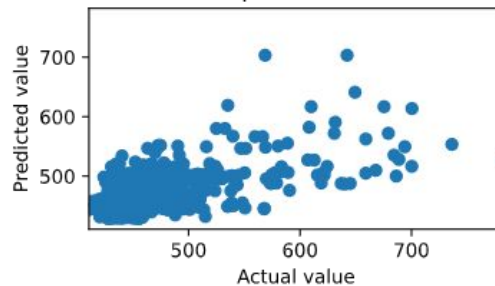
Export Citation

Oplossingen

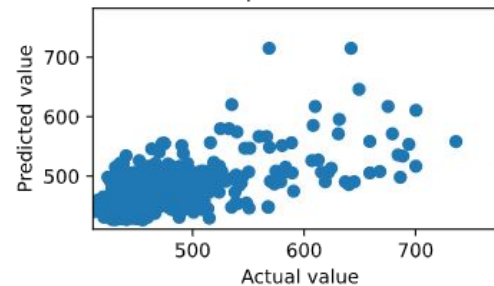
Baseline: Actual vs. Predicted.
R-squared: 0.535



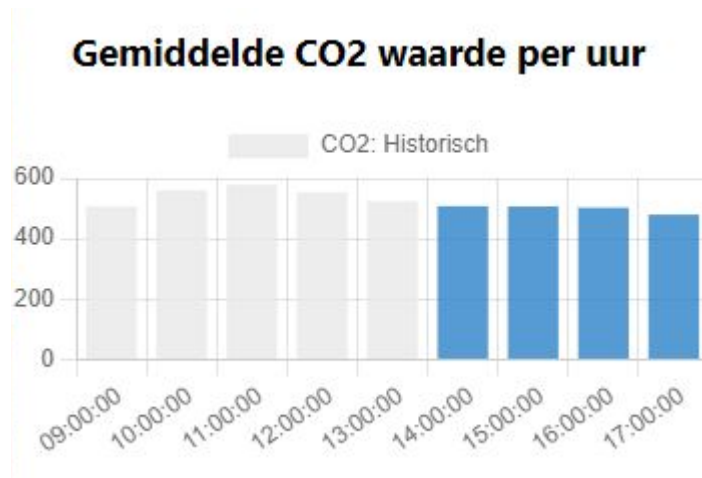
MLP: Actual vs. Predicted.
R-squared: 0.383



Keras: Actual vs. Predicted.
R-squared: 0.374



Implementatie





Classroom

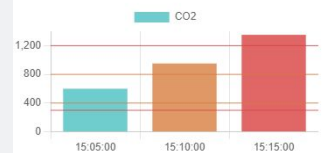
Boardroom

[Terug naar het overzicht](#)

CO2 442 ppm



Verwachte CO2 waarden





IBM Watson



Volgende Meeting - 7 juli

- Laatste oplevering
- Demonstratie van het volledige product