

Purple Analytics

Restaurant Forecasting Web Application

Butch Cassidy Group

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Team Members

Willem Wannenburgh
Frontend

| (BSc III Bioinformatics)

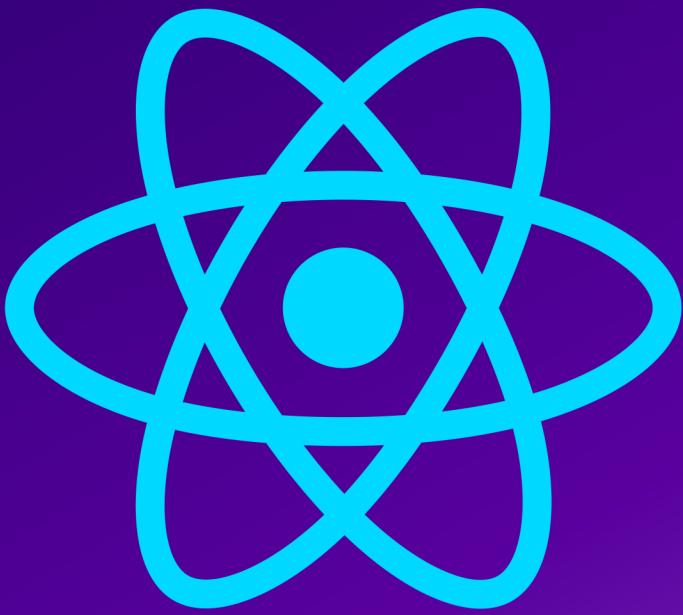
Markus Sass
Backend & Frontend

| (BSc III Computer Science)

Chris Langeveldt
Backend - Machine Learning

| (BSc III Computer Science)

Technology Stack



Frontend

ReactJS

[Apex Graphs]



Backend

Python

[Django, Pandas, LightGBM]

Project Description

Overview

- Web application, dashboard for forecasting order quantities, sales and other, smaller metrics.
- Based on a user-system, such that similar restaurants could possibly draw from the models.
- Restaurant owner uploads data, application processes it

Project Description

Global view of order quantities per day

Forecasted for 12 months

Global view of total sales day

Forecasted for 12 months

Combos of items

Filtered by search

Treemap of popular item distribution

Filtered by search

Weekday quantity sold popularity

Average order value and number of items

Expected number of orders

Prediction of sales change for next day

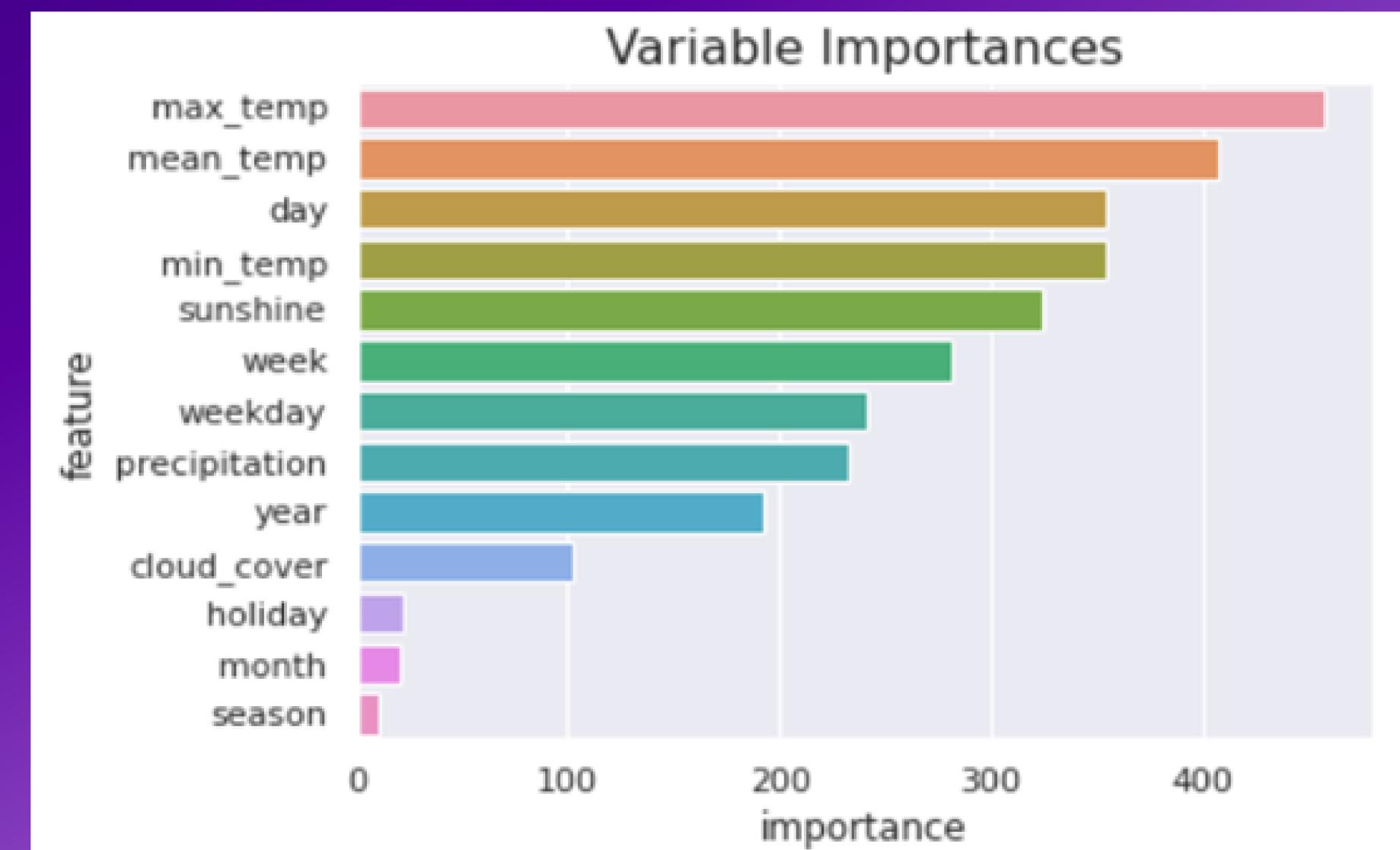
Solution Walkthrough

Light Gradient Boosting Machine

- efficient, accurate, ease of use

Prediction Data

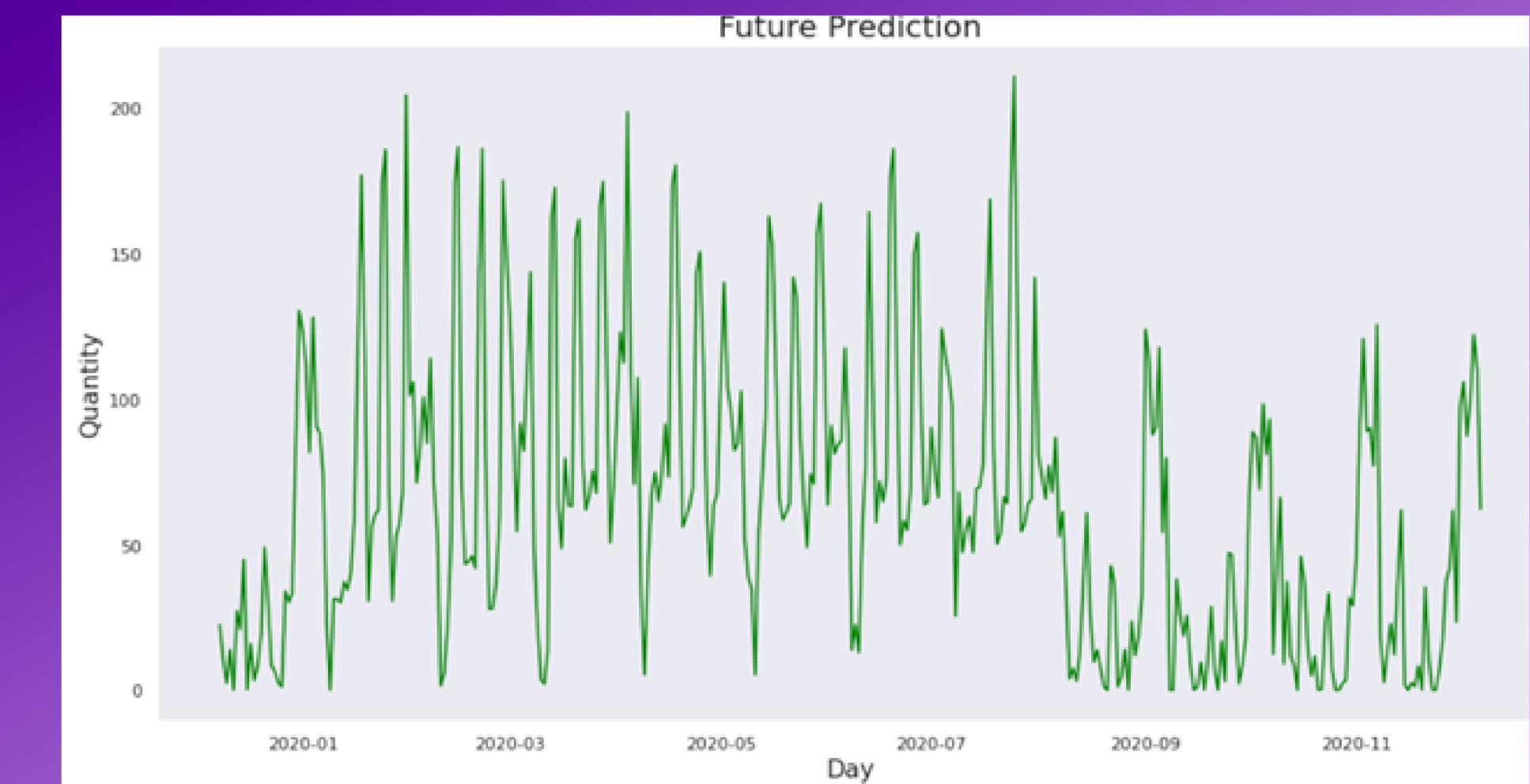
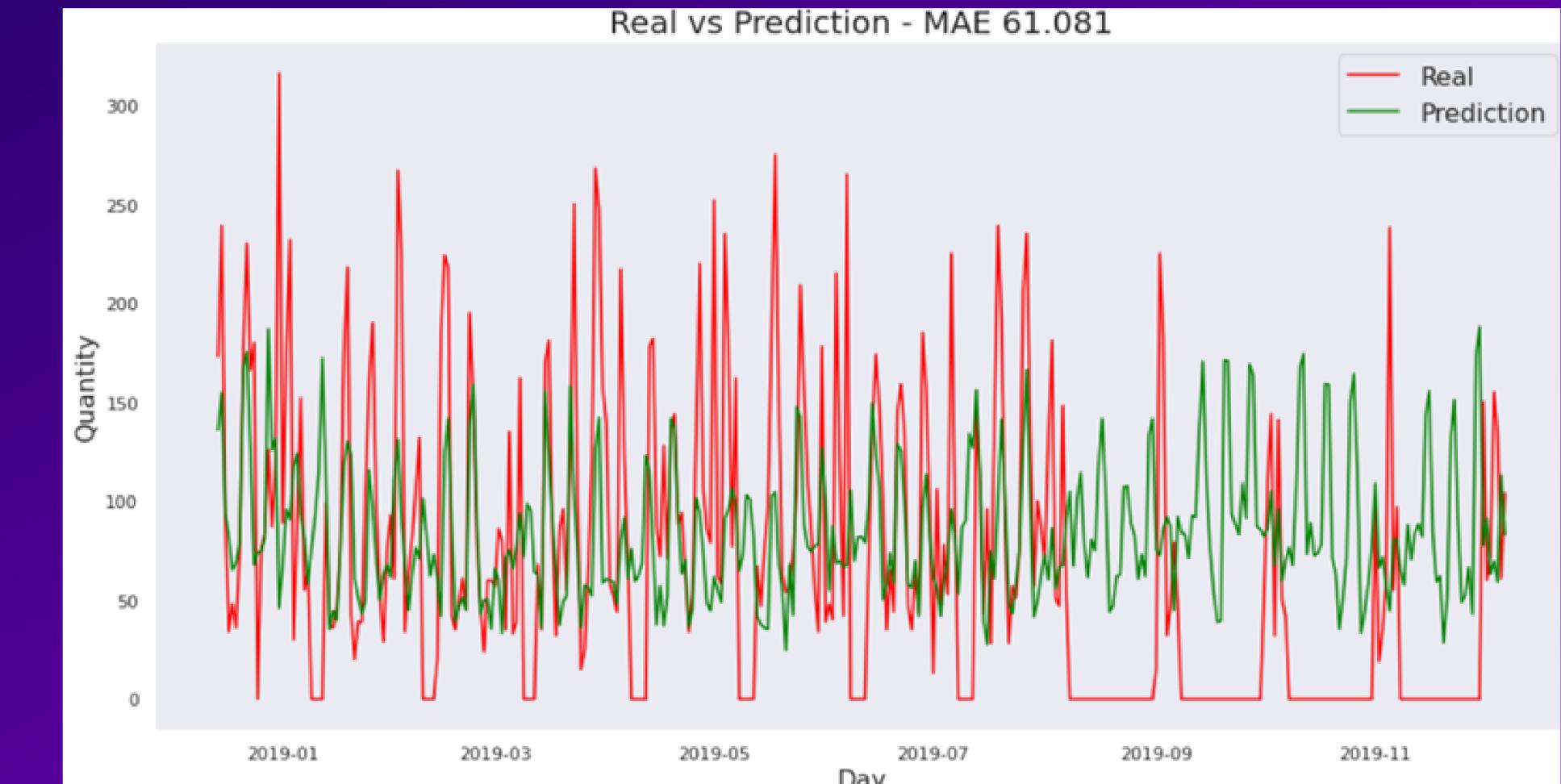
- Weather
- Holidays
- Day, Week, Month, Year
- Day of week
- Season



Prediction Model

Data Trained and Tested

Based on total quantities per day



Thank you

Send

NOW FOR THE DEMO