



EyeOn training Supply chain forecasting with machine learning for data scientists



Data scientists and analysts who want to enhance their forecasting skills in the supply chain domain



The training 'Supply chain forecasting with machine learning for data scientists' is facilitated by Rijk van der Meulen



Customized incompany training, price upon request



Customized incompany training, dates upon request

If you are a data scientist or analyst working with time series data you already know this: time series can be tricky to handle, especially when there are hundreds of thousands of them, like in supply chain demand forecasting.

This specialized training equips you with advanced skills and practical knowledge to tackle these challenges and successfully apply machine learning for demand forecasting in the supply chain context.

Throughout the training, you will delve into the intricacies of supply chain demand forecasting, understanding its profound impact on operational efficiency and decision-making. With a hands-on approach, you will develop expertise in utilizing Darts, a powerful Python library specifically designed for efficient time series forecasting.

Through a combination of theory and practical exercises, you will gain proficiency in model selection, historical simulations (back-testing), and interpreting machine learning predictions. Additionally, you will gain insights into best practices for productizing your forecasting engine.

By the end of this training, you will possess the skills and knowledge needed to confidently tackle supply chain demand forecasting challenges and effectively leverage machine learning techniques for your own use cases.

TOPICS

Day 1

- Understand the challenges and complexities of supply chain demand forecasting and how it impacts the business
- Introduction to statistical forecasting models and how they can be used for supply chain forecasting
- Learn about the importance of model selection and backtesting to design a high-quality forecasting engine

Day 2

- Introduction to machine learning for demand forecasting and how it differs from statistical modelling
- Key concepts such as cross-learning, loss functions, and feature engineering to help you build accurate models
- Exploration of two popular machine learning approaches: gradient boosted trees and deep learning

Day 3

- Model explainability and the importance of making your machine learning models interpretable to stakeholders
- Hands-on hackathon using a challenging dataset to put your skills to the test
- Some best practices for deploying your forecasting engine in production and ensuring it continues to deliver value over time

LEARNING GOALS

- Understand the challenges and complexities of supply chain demand forecasting and how it impacts the business
- Developed advanced skills in supply chain demand forecasting
- Gained hands-on experience with Darts, a powerful Python library for efficient time series forecasting
- Learned how to do efficient model selection and run historical simulations of how well your forecast engine would have performed (i.e., backtesting)
- Understand which machine learning techniques are most appropriate for demand forecasting and how you should apply them
- Are able to explain the predictions made by your machine learning models
- Gained insight into best practices for productizing your own forecasting engine

PREREQUISITES

The only prerequisite we expect is that you have basic experience with Python and some familiarity with working with time series data.

EYEON MASTER CLASSES

This master class is part of the EyeOn Academy for forecasting & planning professionals. The full training curriculum is available on [our website](#).

SIGN UP & MORE INFORMATION

If you want to request this incompany training, please contact Pien Joosten (academy@eyeon.nl).

If you wish to receive more information, please contact Rijk van der Meulen (rijk.vandermeulen@eyeon.nl)

Our promise

We apply proven innovations on forecasting and planning. We approach our clients' challenges in the most pragmatic way possible. Using our extensive knowledge, we deliver valuable results and turn challenges into opportunities. This is how we develop and implement fit-for-purpose improvements with sustainable impact.