

First Models and Tests

Modality: Self-Paced Learning

Duration: 24 Hours

About this Course:

This course introduces you to additional topics in Machine Learning that complement essential tasks, including forecasting and analyzing censored data. You will learn how to find analyze data with a time component and censored data that needs outcome inference. This course also is related to Data section of Data Science, Cleaning, Analyzing and interpreting Data. You will learn a few techniques for Logistic Regression, Time Series Modelling, Time Series Analysis and Survival Analysis. The hands-on section of this course focuses on using best practices and verifying assumptions derived from Statistical Learning.

By the end of this course, you should be able to: Identify common modeling challenges with time series data Explain how to decompose Time Series data: trend, seasonality, and residuals Explain how autoregressive, moving average, and ARIMA models work Understand how to select and implement various Time Series models Describe hazard and survival modeling approaches Identify types of problems suitable for survival analysis.

Who should take this course?

This course targets aspiring data scientists interested in acquiring hands-on experience with Time Series Analysis and Survival Analysis.

What skills should you have?

To make the most out of this course, you should have familiarity with programming on a Python development environment, as well as fundamental understanding of Data Cleaning, Exploratory Data Analysis, Calculus, Linear Algebra, Supervised Machine Learning, Unsupervised Machine Learning, Probability, and Statistics.

Course Outline:

This Course Includes:

- Course Introduction
- Lecture 1: Data Pre-Processing and Feature Engineering
- Lecture 2: Logistic Regression
- Lecture 3: Decision Trees
- Lecture 4: Demo: Building a Complete Model