

Data Science and Machine Learning with Python – Hands-On!

★★★★★ [12 reviews](#)

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Start

TIME TO COMPLETE:
15h 26m

LEVEL:
Beginner to intermediate

TOPICS:

Machine Learning

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Become a data scientist in the tech industry! Comprehensive data mining and machine learning course with Python and Spark

About This Video

- Take your first steps in the world of data science by understanding the tools and techniques of data analysis
- Train efficient machine learning models in Python using the supervised and unsupervised learning methods
- Learn how to use Apache Spark for processing big data efficiently

In Detail

This course starts with a Python crash course and then shows you how to get set up on Microsoft Windows-based PCs, Linux desktops, and Macs. After setup, we will cover the machine learning, AI, and data mining techniques real employers are looking for, including deep learning / neural networks with TensorFlow and Keras; generative models with variational auto-encoders and generative adversarial networks; data visualization in Python with Matplotlib and Seaborn; transfer learning, sentiment analysis, image recognition, and classification; regression analysis, K-Means Clustering, Principal Component Analysis, train/test and cross-validation, Bayesian methods, decision trees and random forests.

We will also cover multiple regression, multi-level models, support vector machines, reinforcement learning, collaborative filtering, K-Nearest Neighbor, bias/variance tradeoff, ensemble learning, term frequency / inverse document frequency, experimental design, and A/B tests, feature engineering, hyperparameter tuning, and much more! There's also an entire section on machine learning with Apache Spark, which lets you scale up these techniques to "big data" analyzed on a computing cluster.

By the end of this course, you will be able to become a professional data scientist.

Audience

Software developers or programmers who want to transition into the lucrative data science career path will learn a lot from this course. Data analysts in finance or other non-tech industries who want to transition into the tech industry can use this course to learn how to analyze data using code instead of tools.

You will need some prior experience in coding or scripting to be successful. If you have no prior coding or scripting experience, you should not take this course as we have covered the introductory Python course in the earlier sections.



About the Publisher

Packt helps real-world developers put software to work in new ways with over 7,500 practical books and videos covering over 1,000 technologies. With coverage ranging from introductory programming to new and emerging technologies, as well as expert advice from industry-leading figures, Packt has great content for any technical professional looking to stay relevant and keep their skills up-to-date.

Resources

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