



Introduction to machine learning with Python and Azure Notebooks

2300 XP

2 hr 11 min • Learning Path • 3 Modules

Beginner Developer Data Scientist Azure Azure Portal

Python has become a dominant language for doing data analysis with machine learning. Learn how to leverage Python and associated libraries in Jupyter Notebooks run on Azure Notebooks to predict patterns and identify trends.

Prerequisites

None

Modules in this learning path



Analyze climate data with Azure Notebooks

900 XP

45 min • Module • 8 Units

★★★★★ 4.7 (268)

Create an Azure Notebook and use three popular Python libraries to analyze climate data collected by NASA, then share it.

Overview

Introduction	5 min	✓
Create an Azure Notebook	5 min	✓
Upload Data and Create Scatterplot	5 min	✓
Perform Linear Regression with Numpy	5 min	✓
Perform Linear Regression with Scikit Learn	5 min	✓
Analyze Data with Seaborn	5 min	✓
Share a Notebook	5 min	✓
Summary and knowledge check	10 min	✓



Predict flight delays by creating a machine learning model in Python

700 XP

51 min • Module • 6 Units

★★★★★ 4.7 (232)

Import airline arrival data into a Jupyter notebook and use Pandas to clean it. Then, build a machine learning model with Scikit-Learn and use Matplotlib to visualize output.

Overview

Introduction	5 min	✓
Create an Azure Notebook and Import Data	8 min	✓
Clean and Prepare Data	10 min	✓
Build Machine Learning Model	15 min	✓
Visualize Output of Model	8 min	✓
Summary and knowledge check	5 min	✓



Analyze the sentiment of reviews with Keras

700 XP

35 min • Module • 5 Units

★★★★★ 4.7 (206)

Keras is a high-level neural networks API, written in Python, that runs on top of other deep learning tools such as TensorFlow. This module uses Keras to build a neural network that scores text, such as user reviews for sentiment.

Overview

Introduction	5 min	✓
Create an Azure Notebook	10 min	✓
Build and Train a Neural Network	5 min	✓
Use the Neural Network to Analyze Text for Sentiment	5 min	✓
Summary and knowledge check	10 min	✓

