

Python for Machine Learning

Learn the fundamentals of Python programming for machine learning with hands-on exercises and real-world examples.

Category: Cryptocurrency · Duration: 3 days

WHO IT IS FOR

- Python developers
- Data analysts and data scientists
- Teams that want hands-on practice on real scenarios

This comprehensive course provides a solid foundation in Python programming for machine learning. Participants will learn essential Python concepts and libraries, such as NumPy, Pandas, Matplotlib, and Scikit-learn, needed for building and implementing machine learning models. Through practical exercises and real-world examples, attendees will gain the skills and knowledge required to develop and deploy machine learning solutions using Python.

Prerequisites

Basic programming knowledge and familiarity with data analysis concepts.

Syllabus

- Introduction to Python programming
- Data types, variables, and operators
- Control flow and loops
- Functions and modules
- File input/output
- Introduction to NumPy
- Arrays and vectorized operations
- Data manipulation with Pandas
- Data visualization with Matplotlib
- Introduction to machine learning
- Supervised learning algorithms
- Unsupervised learning algorithms
- Hands-on project: Predictive modeling

- Performance evaluation and metrics
- Feature selection and engineering
- Model tuning and optimization
- Ensemble methods and boosting
- Introduction to deep learning with Python
- Recurrent neural networks
- Convolutional neural networks