

Machine Learning with Python

Learn the fundamentals of machine learning and how to implement them using Python.

Category: Programming · Duration: 3 days

WHO IT IS FOR

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

In this course, you will gain a deep understanding of machine learning concepts and techniques, and learn how to apply them using Python. With hands-on exercises and real-world examples, you will learn how to build and evaluate machine learning models, preprocess data, and apply various algorithms to solve different types of problems. By the end of the course, you will be well-equipped to leverage the power of machine learning in your projects and make data-driven decisions.

Prerequisites

Basic knowledge of Python programming is required. Familiarity with statistical concepts and linear algebra is recommended.

Syllabus

- Introduction to Machine Learning
- Supervised Learning: Regression
- Supervised Learning: Classification
- Unsupervised Learning: Clustering
- Feature Engineering
- Dimensionality Reduction
- Evaluation and Validation
- Ensemble Methods
- Deep Learning
- Natural Language Processing
- Time Series Forecasting
- Reinforcement Learning

- Building a Machine Learning Pipeline
- Model Deployment and Monitoring
- Advanced Topics in Machine Learning
- Real-world Use Cases
- Hands-on Projects
- Case Studies
- Best Practices and Tips
- Ethical Considerations in Machine Learning