Python Machine Learning Bootcamp

Learn the fundamentals of machine learning, including regression analysis and classification algorithms, in this practical, hands-on course. Gain the skills needed to solve real-world problems using machine learning, with a focus on Python programming and data science libraries.

Group classes in NYC and onsite training is available for this course. For more information, email hello@nobledesktop.com or visit: https://www.nobledesktop.com/classes/python-machine-learning

Course Outline

Fundamentals

Basic Regression Analysis
- Linear Regression
- Mean squared error
- Training set vs Test set
- Cross validation

Advanced Regression Analysis
- Multi-linear regression
- Feature engineering
- Overfitting

Classification

Logistic Regression
- Regression vs Classification
- Logistic Regression
- Sigmoid function

K-nearest Neighbors
- K-nearest neighbors
- Model-based vs memory-based
- Parametric vs non-parametric
- Evaluating performance
Decision Trees

- Decision tree
- Interpretability
- Bias-variance tradeoff

Random forest

- Random forest
- Ensemble methods
- Hyperparameters

Final Portfolio Project