

Introduction to Machine Learning

Learn via: **Classroom**

Duration: **3 Day**

Overview

In a world with abundant data, leveraging machines to learn valuable patterns from structured data can be extremely powerful. We explore the basics of machine learning, discussing concepts like regression, classification, model evaluation metrics, overfitting, variance versus bias, linear regression, ensemble methods, model selection, and hyperparameter optimization.

Through powerful packages such as scikit-learn, students come away with a strong understanding of core concepts in machine learning as well as the ability to efficiently train and benchmark accurate predictive models. They gain hands-on experience building complex ETL pipelines to handle data in a variety of formats; developing models with tools like feature unions and pipelines to reduce duplicate work; and practicing tricks like parallelization to speed up prototyping and development.

Prerequisites

Prerequisite: Basic Python, basic to intermediate statistics, basic linear algebra, and/or successful completion of the Introduction to Predictive Analytics course

Who Should Attend

Individuals comfortable with basic programming and statistics looking to leverage machine-learning techniques for greater data insights.

What You Will Learn

- Core machine learning concepts
- A survey of ML modeling techniques
- Production-grade ML pipeline development