

Introduction to Predictive Analytics

Learn via: **Classroom**

Duration: **3 Days**

Overview

Machine learning requires strong statistical foundations. In this module, we solidify that groundwork by reviewing probability concepts such as important distributions, Bayes' Rule, and conditional expectation. We then move on to rigorous statistical analysis — parameter estimation, hypothesis testing, p -values, z -scores, and other core concepts in statistical inference. We extend this basis of statistical knowledge into machine learning basics such as regression, regularization, overfitting, and important learning metrics. Students put these concepts into practice on real-world datasets using Python's stats-oriented libraries to ask interesting, relevant questions and draw concrete inferences from population data.

Prerequisites

Basic Python, basic statistics, and/or successful completion of the Introduction to Data Wrangling in Python course

Who Should Attend

- Beginning programmers who want an applied statistics introduction, including how to implement that theory into code
- Analysts who have completed Data Wrangling in Python and want to take their skill-set to the next level

What You Will Learn

- The fundamentals of probability and statistical inference
- How to utilize those fundamentals in Python to analyze large, real-world datasets
- Machine-learning basics that derive from statistical principles