Data Analytics Bootcamp

21 PMI PDUs | 21 IIBA CDUs

George Bridges
Instructor

Format: Live Instructor-Led
Online through Zoom
Date: November 17 - 21, 2025
Time: 9:30 AM - 3:00 PM ET
Price: $750 per person

To register:
Email Chris Remmert
cremmert@nysforum.org
and indicate the course title in the subject line.

Technology and Attendance Requirements:
Computer with a browser, Zoom, a microphone and speaker. For this workshop, camera should be on if possible and you must be actively participating.

Want to unlock the mysteries and myths of business data? Data is one of the most important assets of any organization. The efficient use of data can help businesses understand and optimize their processes, improve decision-making, enhance customers' experience, and save time, money and wasted effort. But how do you turn data from a bunch of numbers and graphs into useable information?

This highly interactive course will equip you with the best practices and essential concepts you need to take large datasets containing structured and unstructured data and identify hidden patterns to extract actionable insights.

You'll also learn about modern data disciplines, techniques, and technologies, including Big Data ecosystems and artificial intelligence.

Learning Outcomes:

During this course, you will learn about:

- The concept of data science and designing data for efficient analysis
- Identifying the difference between predictive models and pattern finding ones
- Comparing solutions related to Data Analysis vs. Machine Learning
- The concept of "proprietary" and "open source" technologies
- Creating a modern data flow outline from sources to reports.

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Content:

Introduction: Data Analysis and Visualization Business Intelligence Forecasting

- Types of data and data visualization
- Business Intelligence
- Evaluating the representative quality of Databases: collection and sources data
- ETL
- Using descriptive statistics to summarize Storage: Data warehouses, data marts data and data lakes

Simple Linear Regression Analytics: BI Tools, OLAP, Dashboards,

- Simple Logistic Regression etc.
- Managing and removing outliers
- Forecasting
- Trends

Exponential smoothing: Additive and Machine Learning multiplicative methods

- Multiple linear regressions

Time Series: Additive and multiplicative

- Multiple logistic regressions methods

Discriminant analysis: Functions and ARIMA models probabilistic models R vs. Python

Decision trees: CART – CHAID and Statistical Tests

- Random Forests
- Machine Learning algorithms
- Support vector machines
- Big Data and Big Data Management
- K-nearest neighbors
- IoT essentials - M2M and Embedded
- Naïve Bayes Systems
- Neural networks, deep learning and AI
- Basic IoT protocols possibilities

Big Data: “where” and “when”

- Principle Component Analysis
- Big Data distributed files with HDFS
- Clustering: Hierarchical and K Means
- Map Reduce vs. Spark Data Sharing
- Simple correspondence analysis
- Big Data Ecosystem bird’s eye view:
- Multi-dimensional scaling Spark, Mongo DB, Cassandra, Flume,
- Quadrant analysis Cloudera, Oozie, Mahout