

## Big Data Overview

### Course Summary

#### Description

We all know - Big Data is here in a Big way. However, processing that data can still be a Big challenge. This course provides an in-depth overview of the choices you have in processing Big Data. It provides an introduction to what Big Data is, the types of data you might have, approaches to working on and processing the data, and the capabilities, strengths, and weaknesses of those approaches.

After taking this course, you will have a clear understanding of what Big Data is and of the various types of data you may encounter. You will know different techniques and technologies for working with your data, where those technologies are a good fit, and where they are not. You will be well prepared for evaluating what approach is best suited for your needs.

#### Topics

- Understand what Big Data is
- Know the difference between "data-at-rest" and "data-in-motion"
- Understand what map-reduce / Hadoop is, and what it can do
- Be aware of query technologies for easily querying with Hadoop (e.g. Hive, Pig, and others)
- Understand what NoSQL databases are and what they can do
- Become familiar with the choices in the NoSQL landscape
- Understand the strengths and weaknesses of different NoSQL technologies
- Be well-informed on your choices in Big Data processing, and evaluate them for your needs

#### Audience

This course is ideal for those wanting an introduction to what Big Data is, the types of data you might have, approaches to working on and processing the data, and the capabilities, strengths, and weaknesses of those approaches.

#### Prerequisites

Before taking this class, some knowledge of databases and data processing is useful, but not required.

#### Duration

One day