

Big Data Analytics Reading List

Big Data Analytics will be a major growth area in the next few years. Even among scientific researchers, there have been many problems applying Analytics to Big Data. For example, see this week's Economist magazine, <http://www.economist.com/news/briefing/21588057-scientists-think-science-self-correcting-alarming-degree-it-not-trouble>. Below are some publications for reference related to Big Data Analytics.

Bob Marcus

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Non-technical books on Big Data Analytics that I have downloaded to Kindle.

[*"Doing Data Science: Straight Talk from the Frontline"*](#) by Schutt and O'Neil (NEW)

[*"Smart Machines: IBM's Watson and the Era of Cognitive Computing"*](#) by Hamm (NEW)

[*"The Signal and the Noise"*](#) by Nate Silver

[*"Big Data Imperatives: Enterprise 'Big Data' Warehouse, 'BI' Implementations and Analytics"*](#) by Mohanty, Soumendra, Jagadeesh, Madhu, Srivatsa, Harsha

[*"Predictive Analytics: The Power to Predict Who Will Click, Buy, Lie, or Die"*](#) by Eric Siegel

[*"Big Data Analytics: Disruptive Technologies for Changing the Game"*](#) by Sathi, Arvind

[*"Big Data, Big Analytics: Emerging Business Intelligence and Analytic Trends for Today's Businesses \(Wiley CIO\)"*](#) by Minelli, Michael, Chambers, Michele, Dhiraj, Ambiga

[*"Taming The Big Data Tidal Wave: Finding Opportunities in Huge Data Streams with Advanced Analytics \(Wiley and SAS Business Series\)"*](#) by Franks, Bill

[*"Foundations of Machine Learning \(Adaptive Computation and Machine Learning series\)"*](#) by Mehryar Mohri

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Free technical downloads

[*"Introduction to Bayesian Networks"*](#) by Stefan Conrady and Lionel Jouffe

[*"The Fourth Paradigm: Data Intensive Scientific Discovery"*](#) by Tony Hey, Stewart Tansley, and Kristin Tolle

[*"Machine Learning in Action"*](#) by Peter Harrington

["Bayesian Reasoning and Machine Learning"](#) - David Barber

["Mining of Massive Datasets"](#) - Anand Rajaraman, Jure Leskovec, Jeffrey Ullman

["Frontiers in Massive Data Analysis"](#) from the National Research Council

["Topological Data Analysis"](#) by Afra Zomorodian (Math PhD required)

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Future Possibilities

[Big Data and Business Analytics](#) - Jay Liebowitz;

[Data Science for Business: What you need to know about data mining and data-analytic thinking](#) - Provost and Fawcett

[Foundations of Predictive Analytics \(Chapman & Hall/CRC Data Mining and Knowledge Discovery Series\)](#) - James Wu

[Data-Intensive Computing: Architectures, Algorithms, and Applications](#) - Ian Gorton;

[High Performance Data Mining and Big Data Analytics \(Wiley and SAS Business Series\)](#) - Jared Dean;

[Big Data, Big Analytics: Emerging Business Intelligence and Analytic Trends for Today's Businesses \(Wiley CIO\)](#) - Michael Minelli;

[Ensemble Methods: Foundations and Algorithms \(Chapman & Hall/Crc Machine Learning & Pattern Recognition\)](#) - Zhou

[Data Analytics: Models and Algorithms for Intelligent Data Analysis](#) - Runkler;

[Data Analysis with Open Source Tools](#) - Philipp K. Janert

[Data Mining: Concepts and Techniques, Third Edition \(The Morgan Kaufmann Series in Data Management Systems\)](#) - Jiawei Han

[Principles and Theory for Data Mining and Machine Learning \(Springer Series in Statistics\)](#) - Bertrand Clarke;

[Big Data Analytics: Disruptive Technologies for Changing the Game](#) - Dr. Arvind Sath

[Big Data Analytics: Turning Big Data into Big Money \(Wiley and SAS Business Series\)](#) Frank J. Oehlhorst

[Causality: Models, Reasoning and Inference](#) - Judea Pearl

[The SAGE Handbook of Social Network Analysis](#) - John G Scott