



The
University
Of
Sheffield.

Information
School.

Advanced Reading List

2014-15

MSc Data Science

Books (Core in bold)

Baeza-Yates, R. & Ribeiro-Neto, B. (2011). *Modern Information Retrieval*. Harlow: Addison Wesley. 2nd ed.
Burlingame, L. & Nielsen, L. (2012) *A simple introduction to Data Science*. Wickford, RI: New Street Communications.

Connolly, T. & Begg, C. (2005). *Database Systems: A Practical Approach in Design, Implementation and Management* (4th Edition), London: Addison-Wesley.

Davenport, T.H., Harris, J.G. & Morison, R. (2010) *Analytics at work: smarter decisions, better results*. Harvard Business Review Press.

Davenport, T. (2014) *Big Data at Work: dispelling the myths, uncovering the opportunities*. Harvard Business Review Press.

Ferster, B. (2012) *Interactive visualisation: insight through inquiry*. MIT Press.

Kitchin, R. (2014) *The Data Revolution*, SGAE Publications Ltd

O'Neil, C. & Schutt, R. (2013) *Doing Data Science*. O'Reilly.

Provost, F. & Fawcett, T. (2013) *Data Science for Business*. O'Reilly.

Watson, R.T. (2006). *Data Management: Databases and Organisations* (5th Edition), John Wiley & Sons, Inc .

Witten, I.H., Frank, E. & Hall, M. (2011) *Data Mining: Practical Machine Learning Tools and Techniques*. Morgan Kaufman.

Online articles and books

Acenture (2013) *Big Data Analytics in Supply Chain: Hype or Here to Stay*. Available online:
<http://www.accenture.com/us-en/Pages/insight-global-operations-megatrends-big-data-analytics.aspx>

Chen, Hsinchun, Roger HL Chiang, and Veda C. Storey (2012) Business Intelligence and Analytics: From Big Data to Big Impact, *MIS Quarterly*, 36(4): 1165-1188. Available online: <http://misq.org/misq/downloads/download/editorial/567/>

Keim, D. et al. (2010) *Mastering the Information Age: Solving Problems with Visual Analytics*. Eurographic Association. Available online: [<http://www.vismaster.eu/wp-content/uploads/2010/11/VisMaster-book-lowres.pdf>]

Loukides, M. (2013) *What is Data Science?* O'Reilly. Available online: <http://radar.oreilly.com/2010/06/what-is-data-science.html>

Manning, C.D., Raghavan, P. & Schütze, H. (2007). *Introduction to Information Retrieval*. New York, NY: Cambridge University Press. Available online: <http://www-csli.stanford.edu/~schuetze/information-retrieval-book.html>

Provost, F. & Fawcett, T. (2013) Data Science and its Relationship to Big Data and Data-Driven Decision Making, *Big Data*, 1(1): 51-59. Available online: <http://online.liebertpub.com/doi/full/10.1089/big.2013.1508>

Stanton, J. (2012) *Introduction to Data Science*. Syracuse University. Available online: https://ischool.syr.edu/media/documents/2012/3/DataScienceBook1_1.pdf

UK Government (2013) *Seizing the Data Opportunity: a Strategy for UK Data Capability*. Available online: <https://www.gov.uk/government/publications/uk-data-capability-strategy>