

# SCHOOL OF MATHEMATICAL AND COMPUTER SCIENCES

## READING LIST 2007/2008

### Data Mining & Machine Learning F2.4DN1/F2.9DM1

**Nick Taylor and Philippe De Wilde**

**Berry, M.J.A. and Linoff, G.S.**

“Data Mining Techniques for Marketing, Sales and Customer Relationship Management”, 2<sup>nd</sup> edition  
John Wiley, 2004

Comprehensive coverage of the business of, and surrounding, data mining. Includes many real-life examples.

**De Castro, L.N. and Timmis, J.**

“Artificial Immune Systems: A New Computational Intelligence Approach”  
Springer-Verlag, 2002

Though not very polished, this text has to be cited as it is the only work on this latest machine learning paradigm to be inspired by biology.

**Giudici, P.**

“Applied Data Mining: Statistical Methods for Business and Industry”  
John Wiley, 2003

A thorough treatment of data mining techniques from a statistical perspective. Includes half a dozen case studies.

**Haykin, S.**

“Neural Networks”, 2<sup>nd</sup> edition  
Macmillan, 1999

A comprehensive coverage of the field of artificial neural networks.

**Koza, J.R.**

“Genetic Programming”  
MIT Press, 1992

Although a bit dated, this tome provides a comprehensive coverage of genetic algorithms and other evolutionary computing techniques whilst concentrating on the evolution of code fragments and computer programs.

**Mitchell, T.M.**

“Machine Learning”  
McGraw-Hill, 1997

A thorough review of the key machine learning techniques used in data mining.

**Neapolitan, R.E.**

“Learning Bayesian Networks”  
Prentice Hall, 2004

An excellent text on this increasingly popular approach to machine learning under uncertainty.