Some more of MML's many application areas

Scoring probabilistic predictions

My papers (Dowe & Wallace, 1998; Comley & Dowe, 2003, 2005) first to show how to use both discrete (multi-state, categorical) and continuous valued variables in MML Bayesian nets.

 MML and Efficient Markets Hypothesis: markets not provably efficient

MML, Kolmogorov complexity and measures of "intelligence"

MML and Econometric Time Series

MML, Entropy and Time's Arrow

MML and Linguistics - inferring "dead" languages and human prehistory

MML, cosmological arguments and "Intelligent Design" (I.D.)

Philosophy of science, and N. Goodman's "grue" (paradox or) problem of induction, etc., etc.

see also Solomonoff memorial conference Call for Papers, etc. etc.

Some of David Dowe's papers for further reading

- * "MML, hybrid Bayesian network graphical models, statistical consistency, invariance & uniqueness", Handbook of Philosophy of Statistics), Elsevier, pp901-982, 2011
- * "Measuring Universal Intelligence: Towards an Anytime Intelligence Test", Artificial Intelligence journal, Vol 174, Issue 18, December 2010, pp1508-1539, 2010 [Most downloaded from the *Artificial Intelligence* journal since early March 2011 and currently. Also discussed in "The Economist" magazine, 5/March/2011, page 82.]
- * "Foreword re C. S. Wallace", Computer Journal, Vol. 51, No. 5 (Sept. 2008) [Christopher Stewart WALLACE (1933-2004) memorial special issue], pp523-560, 2008
- * "Bayes Not Bust! Why Simplicity is no problem for Bayesians", British J. Philosophy of Science, Vol. 58, No. 4, December 2007, pp709 754, 2007
- * "Minimum Message Length and Generalised Bayesian Networks with Asymmetric Languages", Chapter 11 in 'Advances in Minimum Description Length: Theory and Applications', MIT Press, April, 2005
- * "General Bayesian Networks and Asymmetric Languages", Proc. 2nd Hawaii International Conference on Statistics and Related Fields, 5-8 June, 2003, 2003
- * "MML clustering of multi-state, Poisson, von Mises circular and Gaussian distributions", Statistics and Computing, Vol. 10, No. 1, Jan. 2000, pp73-83, 2000
- * "Minimum Message Length and Kolmogorov Complexity", Computer Journal, Vol. 42, No. 4, pp270-283, 1999 [Most downloaded from the *Computer Journal*.]
- * "Kolmogorov complexity, minimum message length and inverse learning", 14th Australian Statistical Conf' (ASC-14), Broadbeach, Gold Coast, Qld, 6-10 July 1998, p144, 1998

www.csse.monash.edu.au/~dld/David.Dowe.publications.html