INTERNET ARCHIVE
WayBack Machine

http://wol.ra.phy.cam.ac.uk/mackay/SourceC.html   Go

7 captures
22 Jan 01 - 29 Apr 07

OCT   DEC
◄   **9**   ►
2001   2006

David MacKay

Software + data files

Software
·LaTeX / BibTex
·Information theory/NN teaching software
·*C / Perl Code* **«**
·Data sets
·Error-correcting codes

Publications
·Any Problems?

Any questions?

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Home

Single document

C code

- The old **bigback** Bayesian neural network simulator. source code for bigback5. information (not up to date). I wrote bigback to develop and test the ideas of my phd, for research purposes only. I used it to make my winning entry in the prediction competition. It can implement Bayesian methods for regression nets and classifiers but is a research tool only. Commercial users are asked to send a donation to support my research if they use this software. Anyone interested in non-linear data modelling with neural networks is encouraged to look into Gaussian processes.
- Bigback has been used to create several Materials Modelling Algorithms. See Materials Algorithms Project website then go to Neural networks section
- **macopt:** A conjugate gradient optimizer that I wrote, which only makes use of gradient information and doesn't need a routine that returns the function value. More information about macopt.
- **Free Energy Code** tar. (For decoding and cryptanalysis. Please contact me before taking this code.)
- **Software for simulation of MN codes and GL codes (almost the best error correcting codes in the world!)** tar. (c) David MacKay and Radford Neal.
  see also Radford Neal's software
- A couple of codes for use with the above MN/GL software can be found here: tar. Or you can get individual files here directory. There are three files for each code: A, Cn and G. A is the parity check matrix, and G is the generator matrix. See also Encyclopedia of sparse graph codes.

Perl code

I have written tons of perl programs, which you can find here. All supplied without warranty. (Get perl here)

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