

Overview

The directories below provide the training files and the results for the PLOS ONE manuscript “Probability matching in perceptrons: Effects of conditional dependence and linear nonseparability” by Michael Dawson and Maya Gupta. There are two main subdirectories, one for Simulation 1, the other for Simulation 2 of that manuscript. Each subdirectory is further divided into subdirectories that provide the training sets for the various simulations and the results that are summarized in the manuscript.

The simulations were conducted using the Rosenblatt program, which implements gradient descent training of perceptrons. Detailed descriptions of the mathematics of this program, and accounts of using the software, have been previously published (Dawson, 2004, 2005). The program itself is available as freeware from this location:

<http://www.bcp.psych.ualberta.ca/~mike/Software/Rosenblatt/index.html>

References

- Dawson, M. R. W. (2004). *Minds And Machines: Connectionism And Psychological Modeling*. Malden, MA: Blackwell Pub.
- Dawson, M. R. W. (2005). *Connectionism : A Hands-on Approach* (1st ed.). Oxford, UK ; Malden, MA: Blackwell Pub.