SOFTWARE:


Visualization and Analysis of Neurophysiological Multi-electrode Recording (2000)

The software provides programs for neural data analysis, which can be used for multi-electrode recording data from Dr. Earl Miller's lab (for example, the IT cortex, prefrontal cortex,...), as described in the project.

Software for Analysis of 37-Channel MEG and Fetus MCG Data (2001)

The MEG data analysis has been applied to the data that is part of a paper (with Liya Wang, submitted for publication). The MEG data analysis software could also be used for analysis of MEG experiments that Dr. Kanwisher is supposed to be conducting.

Dr. Assadi's group has also developed a software package for analysis of fMRI data to apply to data from Max Planck (Nikos Logothetis' Lab).

(These software programs are not yet for public use since we would like to complete the results, publish our work, and then apply for patents. When the software is ready for public use, it will be posted on this web site.)


Software for Support Vector Machines

SvmFu 3 is a package written for using Support Vector Machines. It is written in C++, does not require any third-party optimization engine, and is very fast. The algorithm is somewhat inspired by Platt's SVM algorithm, in that it optimizes a pair of points at each iteration, etc. SvmFu only does classification. It cannot do regression. Working with SVMs is a two-step process: training and testing. The training and testing programs are separate. The training program reads in a set of training points (vectors) and saves the trained Support Vector Machine to a file. The testing program reads in a set of testing points and loads the saved SVM.

(SVMFu software is released under a standard open source license.)