BCILAB Scripting and Plugins

1. Lecture 9.1 – Prerequisites
   1. Finding the Right Functions
      1. There is a scriptable function for every GUI command
      2. For documentation on script functions see Help menu of type doc function\_name or help function\_name
      3. Most functions have a brief summary, documentation for all input arguments, and code examples
         1. Every function has default values except for the data
         2. Code samples maybe present too!
      4. Some functions have paper references, some have cross-references
   2. Calling Syntax
      1. Most functions take their arguments in the order in which they are listed in the documentation, and some can *alternatively* [be] called with all parameters passed in as name-value pairs (using the same names as in the help text, in CamelCase)
      2. If in doubt, pass them in by name – less chance of getting the order wrong, etc.
      3. It is usually a bad idea to try and mix positional and name-value arguments in one call – don’t do it unless that’s the default way to call the function
      4. **Example**:  
         bci\_train(mydata,myapproach)  
         bci\_train(‘Data’,mydata,’Approach’,myapproach)
         1. Fundamentally when you are calling a function like above most of them can take the arguments in the order that they show up in the documentation.
         2. Some of the functions, in particular the high level functions and the user written plugins, can also be called with name-value pairs.
   3. Loading Data
      1. A data set (no matter what file format) is loaded using the function io\_loadset()
      2. It is almost always enough [to] pass in just the file name, as in the example:  
         data = io\_loadset(‘/somepath/somefile.xyz’)
2. Lecture 9.2 - Defining an Approach
3. All Other Steps