CED eNews

The eNewsletter from Cambridge Electronic Design

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News

Meetings and events

8th Meeting of the French Neuroscience Society 2007 Corum-Esplanade Charles de Gaulle Montpellier, France May 22nd – 25th 2007

Life Sciences 2007 Scotland Exhibition and Convention Centre Glasgow July 8th – 12th 2007

IBRO World Congress of Neuroscience

Melbourne Exhibition and Convention Centre Melbourne, Australia July 12th – 16th 2007

IBRO Satellite Meeting: Motor Control at the Top End

Darwin, Australia July 18th – 21st 2007

Latest versions of Spike2 and Signal

Updates for Spike2 and Signal are available from the <u>CED downloads</u> page, or by clicking on the links in the table below. Demonstration versions of the latest software are also available.

Spike2 downloads	Signal downloads
Spike2 version 6.03	Signal version 3.09
Spike2 version 5.17	Signal version 2.16
Spike2 demo	Signal demo

A full list of the new features and changes in the software versions is available from the website.



- Q. I use Spike2 for acquisition and analysis on a PC but would also ideally like to analyse files on my office computer, which is a new Intel-based Mac. I have looked at using Apple's Boot Camp to install Windows on my Mac so that I can run Spike2. Do you have any recommendations at all?
- A. Apple's Boot Camp technology allows owners of Intel-based Mac systems to install and run a copy of Windows XP or Vista in addition to an existing Mac OS X installation. This creates a dual-boot system from which the user can select

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between running OS X or Windows. We have used Boot Camp to install Windows XP on a Mac mini running OS X with an Intel Core-Duo 1.66GHz processor and 1GB of RAM. Spike2 was then installed with the standard 1401 drivers and data was sampled successfully.

The next major release of OS X will include Boot Camp as standard; users of the current version of OS X can download Boot Camp 1.2 beta and an installation guide from the Apple website.

Signal

- Q. I use multiple states in dynamic outputs mode to set-up a series of stimulus protocols with varying pulse lengths, intervals and amplitudes. It can be tedious to set each individual state from scratch so I was wondering if there was any way to copy pulse information between states?
- A. The pulses configuration dialog now includes a Copy button that can be used to duplicate outputs between states when using dynamic outputs mode. This makes it easier to set up a number of similar pulse output protocols. You select which output 'tracks' to use and copy the selected information to a range of states.



Pulse configuration dialog with Copy output options

Scripts: Spike2

- Q. I regularly use memory channels to mark the times of peaks in my data but often find that my initial settings for the amplitude field do not capture all peaks in the file if the amplitude changes over time. This means I have to clear data from the memory channel and re-process, often more than once. It would be helpful if there was some way of interactively adjusting the amplitude level and updating the display of the imported events before confirming that the amplitude level was correct.
- A. The attached script, FeatureDetect.s2s, allows the user to interactively import peaks, troughs or threshold crossings based on an amplitude value defined with a pair of horizontal cursors or a single horizontal cursor used as a threshold crossing. The script contains an idle routine that automatically updates the memory channel holding the event markers if the user adjusts the amplitude or threshold level at any time.



11 march





- Q. I am using the MagStim support in Signal to control the various pulse parameters that I use during an experiment. I notice that the MagStim parameters used for each frame are stored as frame variables and that these can be accessed via the script language. Do you have an example script that can access and display these values?
- A. The attached script, FrameVariables.sgs, can read back MagStim or other auxiliary device parameters that are stored as frame variables in the Signal data file during sampling. This example prints a list of the variables for each frame to the Log window but could easily be modified to print specific variable values to an XY plot, for example.

Did you know ...?

When using an output sequence you can disable interactive control of sequence jumps to prevent accidental changes caused by a user key press or mouse click in the sequencer control toolbar. These sequencer control options can be set from the drop-down list in the Sequencer tab of the sampling configuration.

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OK Cancel Run nov	W Help					

Sequencer jump control options

Recent questions

- Q. I would like a way of setting an alarm clock facility in Spike2 to alert me when a set amount of time has elapsed during sampling.
- A. The attached script, Alarm.s2s, allows the user to set an alarm time based on the system clock of the computer. This example simply emits a tone and displays a message box once the alarm time is reached, but could easily be modified to perform other functions in response to the alarm setting such as starting sampling early in the morning before you arrive at work!

User group

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