[11pt](article) (document)

In this research a computational tool named Protolize! was developed for biological signal processing, with emphasis on electroencephalographic signals, in the time-frequency domain. The tool performs analysis using the Fourier Transform, the Short Time Fourier Transform, the Continuous Wavelet Transform and multi-resolution analysis through Discrete Wavelet Transform. It offers configuration options to choose between different kinds of windows and wavelets families. Performance and usefulness of the computational tool were illustrated by processing electroencephalography signals collected, in 47 volunteers, where alpha block phenomenon was reproduced. Protolize! was implemented using Matlab R2007b, and its a free tool available under request.