

ABSTRACT:

This paper proposes a change point detection for electroencephalograms (EEG) signal application based on Particle Swarm Optimization (PSO). As EEG signal is well known consider as non-stationary in nature, we model the signal by using the sinusoidal-Heaviside function, which are capable to represent the change of the behavior of the signal. The parameter of the model with the change point location can be tuned by finding the minimum value of sum squared error. It was showed that the minimum value of sum squared error in the parameter tuning give the exact location of change point. The proposed method is applied to the human EEG during an eye moving task.