Abstract

In recent years, the research communities have focused on using training based classifiers as a tool for signal anomaly/artifacts detection. The efforts in this direction have lead to vast literature and development of classifiers each with its own advantages and disadvantages. This paper provides a comprehensive view on widely used statistical and neural network based classifier. Specifically, Naive Bayes as statistical classifier, Radial Basis Neural Network (RBNN) and Back Propagation Neural Network (BPNN) as neural network classifier are discussed here. For the purpose of comparison, a case study involving signals from multi-spectral line scanner based space camera obtained during on-ground characterization of misregistration among bands is considered.

References


Index Terms

Computer Science, Networks

Keywords

Neural Networks, Classification, Back Propagation Neural Network, Radial Basis Function, Naïve Bayes Classifier