

The Interactive Hyperspectral Exploratory Data Analysis Tool (IHEDAT)

Jeff Solka, Carey Priebe, Dave Marchette, and Ted Clark

Naval Surface Warfare Center, Dahlgren Division

Abstract: We have been involved in the analysis of an artificial olfactory produced data set during the past several years. The response of the system to an analyte consists of 38 time series each sampled 60 times. This response may be thought of as a point in R^{2280} dimensional space. We have developed a new JAVA-based tool that allows us to explore hundreds of observations that reside in this space. We will illustrate the utilization of IHEDAT on a problem of ground water contamination detection.