

The Receiver Operating Characteristic (ROC) Curve Analysis: Theory and Applications

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ABSTRACT

The Receiver Operating Characteristic (ROC) Curve analysis is one of the widely used statistical tool to classify the objects or subjects into one of the predefined population. Over the years, it has taken many methodological developments and applications in wide variety of fields not limited to diagnostic medicine, experimental psychology, bioinformatics and many more. In this talk, an overview about various parametric forms of the ROC in both univariate and multivariate nature will be discussed. Further, focus on available software support to construct the ROC curve and computation of its accuracy and intrinsic measures will also be made.