

## CROSS ADDITIVITY - AN APPLICATION

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### Abstract

We try to show that Discriminant Analysis can be considered as a branch of Statistical Decision Theory when viewed from a Bayesian approach. First we present the necessary measure theory results, next we briefly outline the foundations of Bayesian Inference before developing Discriminant Analysis as an application of Bayesian Estimation. Our approach renders Discriminant Analysis more flexible since it gives the possibility of classing an element as belonging to a group of populations. This possibility arises from the introduction of the concept of regions of controlled posterior risk.

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