

Moments of the discriminant function

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Abstract

Let \mathbf{x} be a p -dimensional random vector $\mathbf{x} = (x_1, \dots, x_p)^\top$. In classification methodology we wish to allocate an observation \mathbf{x} to one of populations $\pi_i, i \in \{1, \dots, q\}$. In this paper, classification rules and their moments for a multivariate normal population are established.

Keywords Classification, linear discriminant analysis, moments of discriminant function