

A Computational Approach to Statistical Inferences

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Abstract

The purpose of this paper is to provide a step by step computational approach to handle statistical inferences based on a parametric model for a given data set. This approach may come handy in those cases where the sampling distributions are not easy to derive or extremely complicated. Our suggested approach provides an algorithmic framework based on the Monte-Carlo simulation and numerical computations which can be implemented mechanically by applied researchers to draw statistical inferences when a suitable parametric model is assumed for a given data set. As a demonstration our proposed method is applied to two real life data sets to show how easily it can be implemented, and in terms of power it can be as good as (if not better than) the other reported method(s).

Keywords: Hypothesis testing, interval estimation, power.

2000 Mathematics Subject Classification: 62F03, 62F25, 62E17.