

Abstract:

In this work we introduce Shapiro-Wilk normality test testing examined statistical sampling. At first, we state the basic information about the normal distribution. Further, we describe the test and we derive the shape of the test statistic W and some of its analytical properties, including two moments and the maximum and minimum allowable values that it may take. We also find some approximations of various coefficients used for calculations and evaluation of the test and also the estimate of the distribution of the test statistics of Shapiro-Wilk test. In conclusion, we show an example of testing and method of implementation in computer programs.