



**Social
Sciences Sector**

Faculty of
Economics and
Political Science

Faculty of Economics & Political Science

Dep. : Statistics

Name : **Ragaa Mohamed Mohamed Kassem**



Title : An Approach For Solving The Stochastic Vector Optimization Problem

Authors : Ragaa Kassem

Published In : Far East Journal of Theoretical Statistics

ISSN 0972-0863

Impact Factor

Abstract :

It was observed that solving the deterministic vector optimization problem (VOP) raises several difficulties which stem from the fact that the solution vector is not uniquely defined. Further difficulties appear in solving the stochastic programming problems with one objective function. This explains why in solving the stochastic VOP one is confronted with almost intractable difficulties and ambiguities.

The major purpose of this paper is to introduce a certain approach for solving the stochastic VOP with random variables in both the objective functions and the constraints. This approach combines the techniques of both the stochastic programming and multiobjective programming in two stages. One of them, the stochastic VOP is transformed into its equivalent deterministic VOP, and the other one, the efficient solutions are generated by transforming the deterministic VOP into a problem with only one objective function.

Keywords:

stochastic multiobjective optimization; efficiency; stochastic programming; vector optimization problem.

Faculty of Economics & Political Science

Dep. : Statistics

Name : **Samir Mostafa Shaarawy**



Title : Bayesian Identification of Multivariate Autoregressive processes

Authors : Wafik Youssef Younan

Published In : Communications in Statistics–Theory and Methods

ISSN 0361-0926

Impact Factor 0.209

Abstract :

This paper develops a direct Bayesian technique for the multivariate autoregressive processes. The proposed technique derives the exact posterior probability mass function of the model order. Then it chooses the order with maximum probability. The numerical study supports the adequacy of the proposed technique.

Keywords:

Identification; multivariate autoregressive processes; probability mass function.

Faculty of Economics & Political Science

Dep. : Statistics

Name : **Wafik Youssef Younan**



Title : Generating New Inequalities And Equalities: A Statistical Approach

Authors : Wafik Youssef Younan

Published In : Far East Journal of Theoretical Statistics

ISSN 0972-0863

Impact Factor

Abstract :

This article gives a set of inequalities based on using known elementary inequalities and probability distributions. The concept depends on replacing the arguments in an elementary inequality with random variables whose domain must be consistent with the constraints the arguments obey. Taking the expectation of both sides of the inequality – after replacement – leads to the result. Seven probability distributions will be used with many elementary inequalities to generate inequalities. The same approach is used to generate a set of equalities too.

Keywords:

Elementary inequalities; Probability distributions; Mathematical expectation.

Faculty of Economics & Political Science

Dep. : Statistics

Name : **Wafik Youssef Younan**



Title : Using Mathematical Induction in Deriving the Exact Distribution of the Gini's Index Estimator: An Application to the Gamma

Authors : Wafik Youssef Younan

Published In : Far East Journal of Theoretical Statistics

ISSN 0972-0863

Impact Factor

Abstract :

This article uses the technique of mathematical induction to derive the exact distribution of the Gini's index estimator as a famous inequality measure of income distributions. An application is given if the underlying distribution is the gamma distribution with a positive integer shape parameter. The population mean of incomes is assumed to be known. The mathematical induction is used to give the proof of determining the bounds of some relations that are linear functions in order statistics. According to the definition of the Gini's index estimator as a linear function in the sample order statistics, the technique enables us to obtain the exact distribution of this estimator.

Keywords:

Gini's index; Mathematical induction; Order statistics; Gamma distribution.

Faculty of Mass Communications

Faculty of Mass Communication



Dep. : Radio & TV

Name : Amal Gaber Saleh Ibrahim

Title : Diffusion of News of the Shuttle Columbia Disaster: The Role of Emotional Responses and Motives for Interpersonal Communication

Authors : Amal Gaber Saleh Ibrahim

Published In : Communication Research Reports

ISSN 0882-4096

Impact Factor

Abstract :

This study examined the role of emotion in the process of news diffusion following the Space Shuttle Columbia disaster. Respondents reported both sadness and anger, but sadness was the predominant emotional response. Early learners reported more sadness, but emotional response was unrelated to the initial source of the news. Regarding interpersonal news diffusion, individuals who reported more sadness were more likely to pass the news on to others and spent more time discussing the event. Anger was associated with contacting a greater number of people. Individuals who contacted more people and spent more time in discussion reported stronger emotional (but not informational) motives for talking with others, and were more likely to say that they felt better after interpersonal contact. Overall, the findings suggest that interpersonal news diffusion and discussion function, in part, as ways to cope with emotional responses to news coverage.

Keywords:

Coping; Emotion; Interpersonal Communication; Motives; News Diffusion