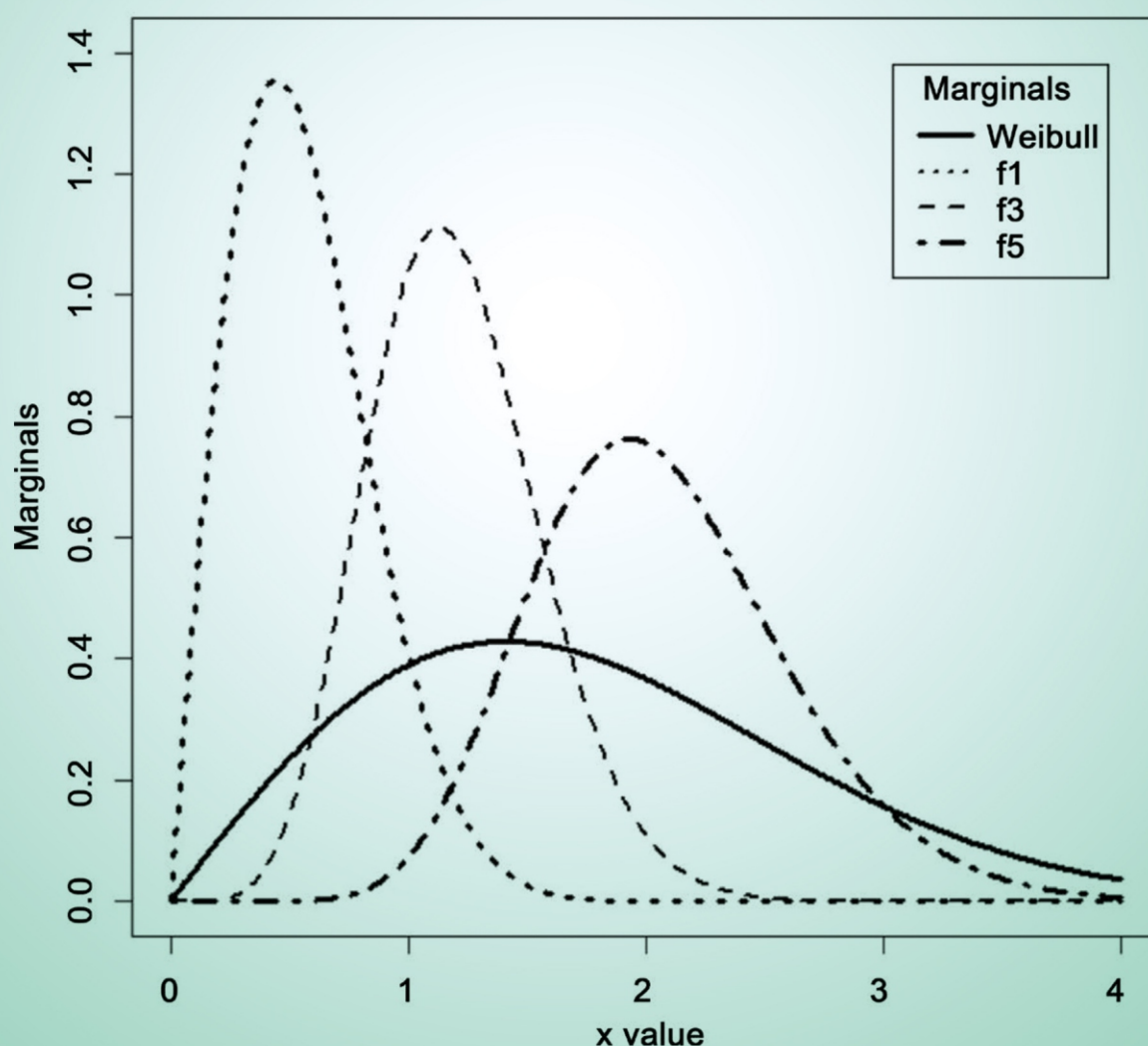


Open Journal of Statistics



ISSN: 2161-718X



Journal Editorial Board

ISSN 2161-718X (Print) ISSN 2161-7198 (Online)

<http://www.scirp.org/journal/ojs>

Editor-in-Chief

Prof. Qihua Wang

Chinese Academy of Sciences, China

Editorial Board

Prof. Ana M. Aguilera

University of Granada, Spain

Prof. Essam K. Al-Hussaini

Alexandria University, Egypt

Prof. Erniel B. Barrios

University of the Philippines, Philippines

Prof. Alexander V. Bulinski

Lomonosov Moscow State University, Russia

Prof. Junsoo Lee

University of Alabama, USA

Prof. Tae-Hwy Lee

University of California, Riverside, USA

Dr. Qizhai Li

Chinese Academy of Sciences, China

Dr. Xuewen Lu

University of Calgary, Canada

Prof. Claudio Morana

University of Milano-Bicocca, Italy

Prof. Thu Pham-Gia

University of Moncton, Canada

Prof. Gengsheng Qin

Georgia State University, USA

Prof. Kalyan Raman

Northwestern University, USA

Prof. Mohammad Z. Raqab

University of Jordan, Jordan

Dr. Jose Antonio Roldán-Nofuentes

University of Granada, Spain

Prof. Sunil K. Sapra

California State University, Los Angeles, USA

Prof. Raghu Nandan Sengupta

Indian Institute of Technology Kanpur, India

Prof. Siva Sivaganesan

University of Cincinnati, USA

Prof. Jianguo Sun

University of Missouri, USA

Prof. Aida Toma

Academy of Economic Studies, Romania

Dr. Haiyan Wang

Kansas State University, USA

Prof. Augustine Chi Mou Wong

York University, Canada

Dr. Peng Zeng

Auburn University, USA

Dr. Jin-Ting Zhang

National University of Singapore, Singapore

Prof. Yichuan Zhao

Georgia State University, USA

Dr. Wang Zhou

National University of Singapore, Singapore

Table of Contents

Volume 7 Number 4

August 2017

Simple Linear Regression Model for Hidden/Hard-to-Reach/Elusive Populations

M. Tuahiru, M. Alhassan, H. Abdul-Rahaman.....551

Modeling and Forecasting of Carbon Dioxide Emissions in Bangladesh Using Autoregressive Integrated Moving Average (ARIMA) Models

A. Rahman, M. M. Hasan.....560

Sparse Additive Gaussian Process with Soft Interactions

G. Vo, D. Pati.....567

Research and Application of FAHP in Bidding Quotation for Petroleum Geophysical Prospecting Project

J. Wang, J. H. Guan, D. L. Liu.....589

The Need for Structural Adjustment: Was It Essential for African Countries over the Decade of the 80's? An Econometric Analysis Using Count Data Models

S. Ambapour.....599

Assessing Actuarial Projections Accuracy: Traditional vs. Experimental Strategy

M. Russolillo.....608

Generalized Additive Mixed Modelling of River Discharge in the Black Volta River

W. A. Iddrisu, K. S. Nokoe, A. Luguterah, E. O. Antwi.....621

On Marginal Distributions under Progressive Type II Censoring: Similarity/Dissimilarity Properties

A. Helu, H. Samawi.....633

Generalized Inverted Kumaraswamy Distribution: Properties and Application

Z. Iqbal, M. M. Tahir, N. Riaz, S. A. Ali, M. Ahmad.....645

Major Determinants that Influence the Choice of Brand of Mobile Phone

F. B. K. Twenefour.....663

An Analysis of Fights in the National Hockey League

H. L. Castillo, P. M. Sommers.....676

Approximation of Finite Population Totals Using Lagrange Polynomial

L. Kabareh, T. Mageto, B. Muema.....689

Dimensionality Reduction of High-Dimensional Highly Correlated Multivariate Grapevine Dataset

U. K. Jha, P. Bajorski, E. Fokoue, J. V. Heuvel, J. van Aardt, G. Anderson.....702

Univariate Time-Series Analysis of Second-Hand Car Importation in Zambia

S. Jere, B. Kasense, B. B. Bwalya.....718

Portfolio Optimization under Cardinality Constraints: A Comparative Study

H. C. Jimbo, I. S. Ngongo, N. G. Andjiga, T. Suzuki, C. A. Onana.....731

Simulated Minimum Hellinger Distance Estimation for Some Continuous Financial and Actuarial Models

A. Luong, C. Bilodeau.....743

Open Journal of Statistics (OJS)

Journal Information

SUBSCRIPTIONS

The *Open Journal of Statistics* (Online at Scientific Research Publishing, www.SciRP.org) is published bimonthly by Scientific Research Publishing, Inc., USA.

Subscription rates:

Print: \$69 per issue.

To subscribe, please contact Journals Subscriptions Department, E-mail: sub@scirp.org

SERVICES

Advertisements

Advertisement Sales Department, E-mail: service@scirp.org

Reprints (minimum quantity 100 copies)

Reprints Co-ordinator, Scientific Research Publishing, Inc., USA.

E-mail: sub@scirp.org

COPYRIGHT

Copyright and reuse rights for the front matter of the journal:

Copyright © 2017 by Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY).

<http://creativecommons.org/licenses/by/4.0/>

Copyright for individual papers of the journal:

Copyright © 2017 by author(s) and Scientific Research Publishing Inc.

Reuse rights for individual papers:

Note: At SCIRP authors can choose between CC BY and CC BY-NC. Please consult each paper for its reuse rights.

Disclaimer of liability

Statements and opinions expressed in the articles and communications are those of the individual contributors and not the statements and opinion of Scientific Research Publishing, Inc. We assume no responsibility or liability for any damage or injury to persons or property arising out of the use of any materials, instructions, methods or ideas contained herein. We expressly disclaim any implied warranties of merchantability or fitness for a particular purpose. If expert assistance is required, the services of a competent professional person should be sought.

PRODUCTION INFORMATION

For manuscripts that have been accepted for publication, please contact:

E-mail: ojs@scirp.org



Call for Papers

Open Journal of Statistics

ISSN 2161-718X (Print) ISSN 2161-7198 (Online)

<http://www.scirp.org/journal/ojs>

Open Journal of Statistics (OJS) is an international journal dedicated to the latest advancement of statistics. The goal of this journal is to provide a platform for scientists and academicians all over the world to promote, share, and discuss various new issues and developments in different areas of statistics.

Editor-in-Chief

Prof. Qihua Wang

Chinese Academy of Sciences, China

Editorial Board

Prof. Ana M. Aguilera
Prof. Essam K. Al-Hussaini
Prof. Erniel B. Barrios
Prof. Alexander V. Bulinski
Prof. Junsoo Lee
Prof. Tae-Hwy Lee
Dr. Qizhai Li
Dr. Xuewen Lu
Prof. Claudio Morana

Prof. Thu Pham-Gia
Prof. Gengsheng Qin
Prof. Kalyan Raman
Prof. Mohammad Z. Raqab
Dr. Jose Antonio Roldán-Nofuentes
Prof. Sunil K. Sapra
Prof. Raghu Nandan Sengupta
Prof. Siva Sivaganesan
Prof. Jianguo Sun

Prof. Aida Toma
Dr. Haiyan Wang
Prof. Augustine Chi Mou Wong
Dr. Peng Zeng
Dr. Jin-Ting Zhang
Prof. Yichuan Zhao
Dr. Wang Zhou

Subject Coverage

This journal invites original research and review papers that address the following issues in statistics. Topics of interest include, but are not limited to:

- ◆ Actuarial science
- ◆ Applied information economics
- ◆ Asymptotic statistics
- ◆ Bayesian statistics
- ◆ Biostatistics
- ◆ Business statistics
- ◆ Causal inference
- ◆ Chemometrics
- ◆ Computational statistics
- ◆ Data mining
- ◆ Decision theory
- ◆ Demography
- ◆ Descriptive statistics
- ◆ Design of experiments
- ◆ Econometrics
- ◆ Energy statistics
- ◆ Engineering statistics
- ◆ Epidemiology
- ◆ Estimation theory
- ◆ Geographic information systems
- ◆ Graphic models and related theory
- ◆ High dimensional data analysis
- ◆ Image processing
- ◆ Multivariate analysis
- ◆ Non-parametric statistics
- ◆ Parametric statistics
- ◆ Psychological statistics
- ◆ Regression analysis
- ◆ Reliability
- ◆ Reliability engineering
- ◆ Sample survey
- ◆ Sampling theory
- ◆ Semiparametric statistics
- ◆ Social statistics
- ◆ Statistical analysis with complex data
- ◆ Statistical computing
- ◆ Statistical inference
- ◆ Statistical methods
- ◆ Survival analysis
- ◆ Theoretic methods
- ◆ Time series analysis

We are also interested in short papers (letters) that clearly address a specific problem, and short survey or position papers that sketch the results or problems on a specific topic. Authors of selected short papers would be invited to write a regular paper on the same topic for future issues of the OJS.

Notes for Intending Authors

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. Paper submission will be handled electronically through the website. All papers are refereed through a peer review process. For more details about the submissions, please access the website.

Website and E-Mail

<http://www.scirp.org/journal/ojs>

Email: ojs@scirp.org