The easy way to find open access journals

DOAJ
DIRECTORY OF OPEN ACCESS JOURNALS
www.doaj.org

The Directory of Open Access Journals covers free, full text, quality controlled scientific and scholarly journals. It aims to cover all subjects and languages.

Aims

• Increase visibility of open access journals
• Simplify use
• Promote increased usage leading to higher impact

Scope

The Directory aims to be comprehensive and cover all open access scientific and scholarly journals that use a quality control system to guarantee the content. All subject areas and languages will be covered.

In DOAJ browse by subject

Agriculture and Food Sciences
Biology and Life Sciences
Chemistry
General Works
History and Archaeology
Law and Political Science
Philosophy and Religion
Social Sciences
Arts and Architecture
Business and Economics
Earth and Environmental Sciences
Health Sciences
Languages and Literatures
Mathematics and statistics
Physics and Astronomy
Technology and Engineering

Contact
Lotte Jørgensen, Project Coordinator
Lund University Libraries, Head Office
E-mail: lotte.jorgensen@lub.lu.se
Tel: +46 46 222 34 31

Funded by
www.soros.org

Hosted by
www.lu.se
Editorial Board

Subhash Chandra Bagui
Department of Mathematics & Statistics
University of West Florida

J. Jackson Barnette
School of Public Health
University of Alabama at Birmingham

Vincent A. R. Camara
Department of Mathematics
University of South Florida

Ling Chen
Department of Statistics
Florida International University

Christopher W. Chiu
Test Development & Psychometric Rsch
Law School Admission Council, PA

Jai Won Choi
National Center for Health Statistics
Hyattsville, MD

Rahul Dhanda
Forest Pharmaceuticals
New York, NY

John N. Dyer
Dept. of Information System & Logistics
Georgia Southern University

Matthew E. Elam
Dept. of Industrial Engineering
University of Alabama

Mohammed A. El-Saidi
Accounting, Finance, Economics & Statistics, Ferris State University

Felix Famoye
Department of Mathematics
Central Michigan University

Barbara Foster
Academic Computing Services, UT
Southwestern Medical Center, Dallas

Shiva Gautam
Department of Preventive Medicine
Vanderbilt University

Dominique Haughton
Mathematical Sciences Department
Bentley College

Scott L. Hershberger
Department of Psychology
California State University, Long Beach

Joseph Hilde
Departments of Statistics/ Sociology
Arizona State University

Sin-Ho Jung
Dept. of Biostatistics & Bioinformatics
Duke University

Jong-Min Kim
Statistics, Division of Science & Math
University of Minnesota

Harry Khamis
Statistical Consulting Center
Wright State University

Kallappa M. Koti
Food and Drug Administration
Rockville, MD

Tomasz J. Kozubowski
Department of Mathematics
University of Nevada

Kwan R. Lee
GlaxoSmithKline Pharmaceuticals
Collegeville, PA

Hee-Jeong Lim
Dept. of Math & Computer Science
Northern Kentucky University

Balgozin Nandram
Department of Mathematical Sciences
Worcester Polytechnic Institute

J. Sunil Rao
Dept. of Epidemiology & Biostatistics
Case Western Reserve University

Karan P. Singh
University of North Texas Health
Science Center, Fort Worth

Jianguo (Tony) Sun
Department of Statistics
University of Missouri, Columbia

Joshua M. Tebbs
Department of Statistics
Kansas State University

Dimitrios D. Thomakos
Department of Economics
Florida International University

Justin Tobias
Department of Economics
University of California-Irvine

Dawn M. VanLieuwen
Agricultural & Extension Education
New Mexico State University

David Walker
Educational Tech, Rsrch, & Assessment
Northern Illinois University

J. J. Wang
Dept. of Advanced Educational Studies
California State University, Bakersfield

Dongfeng Wu
Dept. of Mathematics & Statistics
Mississippi State University

Chengjie Xiong
Division of Biostatistics
Washington University in St. Louis

Andrei Yakovlev
Biostatistics and Computational Biology
University of Rochester

Heping Zhang
Dept. of Epidemiology & Public Health
Yale University

INTERNATIONAL

Mohammed Ageel
Dept. of Mathematics, & Graduate School
King Khalid University, Saudi Arabia

Mohammad Fraiwan Al-Saleh
Department of Statistics
Yarmouk University, Irbid-Jordan

Keumhee Chough (K.C.) Carriere
Mathematical & Statistical Sciences
University of Alberta, Canada

Michael B. C. Khoo
Mathematical Sciences
Universiti Sains, Malaysia

Debasis Kundu
Department of Mathematics
Indian Institute of Technology, India

Christos Koukouvinos
Department of Mathematics
National Technical University, Greece

Lisa M. Lix
Dept. of Community Health Sciences
University of Manitoba, Canada

Takis Papaioannou
Statistics and Insurance Science
University of Piraeus, Greece

Nasrollah Saebi
School of Mathematics
Kingston University, UK

Keming Yu
Department of Statistics
University of Plymouth, UK
## Journal Of Modern Applied Statistical Methods

### Invited Article

<table>
<thead>
<tr>
<th>Page</th>
<th>Author(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 – 10</td>
<td>Rand R. Wilcox</td>
<td>Within by Within Anova Based on Medians</td>
</tr>
</tbody>
</table>

### Regular Articles

<table>
<thead>
<tr>
<th>Page</th>
<th>Author(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 – 34</td>
<td>Biao Zhang</td>
<td>Testing the Goodness of Fit of Multivariate Multiplicative-intercept Risk Models Based on Case-control Data</td>
</tr>
<tr>
<td>35 – 42</td>
<td>Panagiotis Mantalos</td>
<td>Two Sides of the Same Coin: Bootstrapping the Restricted vs. Unrestricted Model</td>
</tr>
<tr>
<td>43 – 52</td>
<td>John P. Wendell, Sharon P. Cox</td>
<td>Coverage Properties of Optimized Confidence Intervals for Proportions</td>
</tr>
<tr>
<td>53 – 62</td>
<td>Rand R. Wilcox, Mitchell Earleywine</td>
<td>Inferences about Regression Interactions via a Robust Smoother with an Application to Cannabis Problems</td>
</tr>
<tr>
<td>63 – 74</td>
<td>Stan Lipovetsky, Michael Conklin</td>
<td>Regression by Data Segments via Discriminant Analysis</td>
</tr>
<tr>
<td>81 – 89</td>
<td>B. Sango Otieno, C. Anderson-Cook</td>
<td>Effect of Position of an Outlier on the Influence Curve of the Measures of Preferred Direction for Circular Data</td>
</tr>
<tr>
<td>90 – 99</td>
<td>Inger Persson, Harry Khamis</td>
<td>Bias of the Cox Model Hazard Ratio</td>
</tr>
<tr>
<td>100 – 105</td>
<td>David A. Walker</td>
<td>Bias Affiliated with Two Variants of Cohen’s d When Determining $U_1$ as A Measure of the Percent of Non-Overlap</td>
</tr>
<tr>
<td>106 – 119</td>
<td>C. Anderson-Cook, Kathryn Prewitt</td>
<td>Some Guidelines for Using Nonparametric Methods for Modeling Data from Response Surface Designs</td>
</tr>
<tr>
<td>120 – 133</td>
<td>Gibbs Y. Kanyongo</td>
<td>Determining the Correct Number of Components to Extract from a Principal Components Analysis: A Monte Carlo study of the Accuracy of the Scree Plot</td>
</tr>
<tr>
<td>134 – 139</td>
<td>Abdullah Almasri, Ghazi Shukur</td>
<td>Testing the Casual Relation Between Sunspots and Temperature Using Wavelets Analysis</td>
</tr>
<tr>
<td>140 – 154</td>
<td>Leming Qu</td>
<td>Bayesian Wavelet Estimation of Long Memory Parameter</td>
</tr>
</tbody>
</table>
155 – 162  Kosei Fukuda  Model-Selection-Based Monitoring of Structural Change

163 – 171  Lyle Broemeling, Dongfeng Wu  On the Power Function of Bayesian Tests with Application to Design of Clinical Trials: The Fixed-Sample Case

172 – 186  Vincent Camara, Chris P. Tsokos  Bayesian Reliability Modeling Using Monte Carlo Integration

187 – 213  Michael C. Long, Ping Sa  Right-tailed Testing of Variance for Non-Normal Distributions

214 – 226  Hasan Hamdan, John Nolan, Melanie Wilson, Kristen Dardia  Using Scale Mixtures of Normals to Model Continuously Compounded Returns

227 – 239  Michael B.C. Khoo, T. F. Ng  Enhancing the Performance of a Short Run Multivariate Control Chart for the Process Mean


251 – 274  Yonghong Jade Xu  An Exploration of Using Data Mining in Educational Research


**Brief Report**

283 – 287  J. Thomas Kellow  Exploratory Factor Analysis in Two Measurement Journals: Hegemony by Default

**Early Scholars**

288 – 299  Ling Chen, Mariana Drane, Robert F. Valois, J. Wanzer Drane  Multiple Imputation for Missing Ordinal Data

**JMASM Algorithms and Code**

300 – 311  Hakan Demirtas  JMASM16: Pseudo-Random Number Generation in R for Some Univariate Distributions (R)
312 – 318  **Sikha Bagui, Subhash Bagui**  
JMASM17: An Algorithm and Code for Computing Exact Critical Values for Friedman’s Nonparametric ANOVA (Visual Basic)

319 – 332  **J. I. Odiase, S. M. Ogbonmwan**  
JMASM18: An Algorithm for Generating Unconditional Exact Permutation Distribution for a Two-Sample Experiment (Visual Fortran)

333 – 342  **David A. Walker**  
JMASM19: A SPSS Matrix for Determining Effect Sizes From Three Categories: r and Functions of r, Differences Between Proportions, and Standardized Differences Between Means (SPSS)

**Statistical Software Applications & Review**
343 – 351  **Paul Mondragon, Brian Borchers**  
A Comparison of Nonlinear Regression Codes

**Letter To The Editor**
352  **Shlomo Sawilowsky**  
Abelson’s Paradox And The Michelson-Morley Experiment
**JMASM** is an independent print and electronic journal (http://tbf.coe.wayne.edu/jmasm) designed to provide an outlet for the scholarly works of applied nonparametric or parametric statisticians, data analysts, researchers, classical or modern psychometricians, quantitative or qualitative evaluators, and methodologists. Work appearing in Regular Articles, Brief Reports, and Early Scholars are externally peer reviewed, with input from the Editorial Board; in Statistical Software Applications and Review and JMASM Algorithms and Code are internally reviewed by the Editorial Board.

Three areas are appropriate for JMASM: (1) development or study of new statistical tests or procedures, or the comparison of existing statistical tests or procedures, using computer-intensive Monte Carlo, bootstrap, jackknife, or resampling methods, (2) development or study of nonparametric, robust, permutation, exact, and approximate randomization methods, and (3) applications of computer programming, preferably in Fortran (all other programming environments are welcome), related to statistical algorithms, pseudo-random number generators, simulation techniques, and self-contained executable code to carry out new or interesting statistical methods. Elegant derivations, as well as articles with no take-home message to practitioners, have low priority. Articles based on Monte Carlo (and other computer-intensive) methods designed to evaluate new or existing techniques or practices, particularly as they relate to novel applications of modern methods to everyday data analysis problems, have high priority.

Problems may arise from applied statistics and data analysis; experimental and nonexperimental research design; psychometry, testing, and measurement; and quantitative or qualitative evaluation. They should relate to the social and behavioral sciences, especially education and psychology. Applications from other traditions, such as actuarial statistics, biometrics or biostatistics, chemometrics, econometrics, environmetrics, jurimetrics, quality control, and sociometrics are welcome. Applied methods from other disciplines (e.g., astronomy, business, engineering, genetics, logic, nursing, marketing, medicine, oceanography, pharmacy, physics, political science) are acceptable if the demonstration holds promise for the social and behavioral sciences.