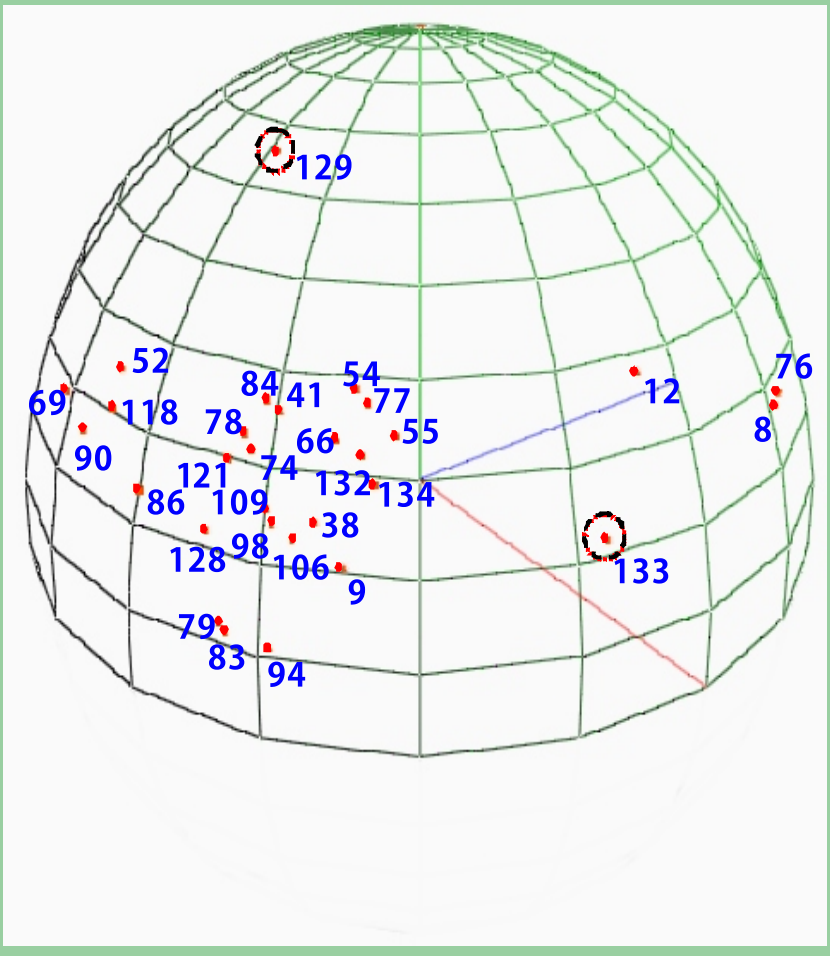
ISSN: 2160-8830 Vol. 1, No. 2, June 2011

Scientific Research

American Journal of Operations Research



ISSN: 2160-8830

www.scirp.org/journal/ajor

Journal Editorial Board

ISSN 2160-8830 (Print) ISSN 2160-8849 (Online)
http://www.scirp.org/journal/ajor

Editor in Chief

Dr. Jinfeng Yue Middle Tennessee State University, USA

Editorial Board

Dr. Javier De Andrés	University of Oviedo, Spain
Prof. Janine E. Aronson	University of Georgia, USA
Prof. Nabil Belacel	Simon Fraser University, Canada
Dr. Ignacio Castillo	Wilfrid Laurier University, Canada
Prof. Muhammad El-Taha	University of Southern Maine, USA
Dr. Vladimir Filipović	University of Belgrade, Serbia
Dr. Ricardo Josa Fombellida	University of Valladolid, Spain
Dr. Carmen Galé	University of Zaragoza, Spain
Prof. Mhand Hifi	University of Picardie Jules Verne, France
Prof. Zhibin Jiang	Shanghai Jiao Tong University, China
Prof. Dennis Leech	University of Warwick, UK
Dr. Zhaosong Lu	Simon Fraser University, Canada
Prof. Monga Kalonda Luhandjula	University of South Africa, South Africa
Prof. Joaquín Antonio Pacheco Bonrostro	University of Burgos, Spain
Prof. Gregory P. Prastacos	Athens University of Economics and Business, Greece
Dr. Jamal Ouenniche	University of Edinburgh, UK
Prof. Javier Ramirez Rodriguez	The Metropolitan Autonomous University, Mexico
Prof. Bhaba R. Sarker	Louisiana State University, USA
Prof. R. Raghavendra Kumar Sharma	IIT Kanpur, India
Prof. Andranik Tangian	Karlsruhe Institute of Technology, Germany
Prof. Etsuji Tomita	The University of Electro-Communications, Japan
Dr. Delfim F. M. Torres	University of Aveiro, Portugal
Prof. Evangelos Triantaphyllou	Louisiana State University, USA
Dr. Manish Verma	Memorial University of Newfoundland, Canada
Prof. Yi-Min Xie	RMIT University, Australia
Dr. Jiping Yang	Beihang University, China
Dr. Bin Zhang	Sun Yat-Sen University, China

Guest Reviewer:

Andre Rossi,
Alain PIETRUS,
Chih-Chin Liang,
Pedro Lorca,
Jose Humberto Ablanedo-Rosas,
Xiaoning Zhang,
FABRIZIO MARINELLI,
Jerzy Michnik, Frank Meisel,
Ulrike LEOPOLD-WILDBURGER,
Nodari Vakhania,
Petr Ya. Ekel,
Zhenjun Shi,
Zixiang Xu,
Xiang Song,
Takeo Yamada,
Yuan-Shyi Peter Chiu,
Vassilis Kostoglou,
Ahmed NAIT-SIDI-MOH

Editorial Assistant

Judy Liu Scientific Research Publishing, USA Email: ajor@scirp.org

American Journal of Operations Research, 2011, 1, 25-72
Published Online June 2011 in SciRes (http://www.SciRP.org/journal/ajor/)

TABLE OF CONTENTS

Volume 1 Number 2 June 2011

Component-Oriented Reliability Analysis Based on Hierarchical Bayesian Model for an Open Source Software
Y. Tamura, H. Takehara, S. Yamada……25

Extracting a Heterogeneous Social Network of Academic Researchers on the Web Based on Information Retrieved from Multiple Sources
R. M. Alguliev, R. M. Aliguliyev, F. S. Ganjaliyev……33

A Multi-Objective Obnoxious Facility Location Model on a Plane
U. K. Bhattacharya……39

Optimal Policy and Simple Algorithm for a Deteriorated Multi-Item EOQ Problem
B. Zhang, X. Y. Wang……46

A Museum Cost Sharing Problem
Y. T. Wang……51

Visualizing Investment Decision on Decision Balls
L.-C. Ma……57

Evaluating the Performance of Iranian Football Teams Utilizing Linear Programming
J. Soleimani-Damaneh, M. Hamidi, N. Sajadi……65

The figure on the front cover is from the article published in *American Journal of Operations Research*, 2011, Vol. 1, No. 2, pp. 57-64, by Li-Ching Ma.

Copyright © 2011 SciRes.

American Journal of Operations Research (AJOR)

Journal Information

SUBSCRIPTIONS

The *American Journal of Operations Research* (Online at Scientific Research Publishing, www.SciRP.org) is published quarterly by Scientific Research Publishing, Inc., USA.

Subscription rates:

Print: $39 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©2011 Scientific Research Publishing, Inc.

All Rights Reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as described below, without the permission in writing of the Publisher.

Copying of articles is not permitted except for personal and internal use, to the extent permitted by national copyright law, or under the terms of a license issued by the national Reproduction Rights Organization.

Requests for permission for other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works or for resale, and other enquiries should be addressed to the Publisher.

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 assumes 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: ajor@scirp.org

Call for Papers

American Journal of Operations Research

ISSN 2160-8830 (Print) ISSN 2160-8849 (Online)
http://www.scirp.org/journal/ajor

AJOR is an international scientific journal dedicated to the publication and public discussion of high quality, original papers that contribute to the methodology of operational research and to the practice of decision making.

Editor in Chief

Dr. Jinfeng Yue Middle Tennessee State University, USA

Editorial Board

Dr. Javier De Andrés
Prof. Janine E. Aronson
Prof. Nabil Belacel
Dr. Ignacio Castillo
Prof. Muhammad El-Taha
Dr. Vladimir Filipović
Dr. Ricardo Josa Fombellida
Dr. Carmen Galé
Prof. Mhand Hifi
Prof. Zhibin Jiang
Prof. Dennis Leech
Dr. Zhaosong Lu
Prof. Monga Kalonda Luhandjula
Prof. Joaquín Antonio Pacheco Bonrostro
Prof. Gregory P. Prastacos
Dr. Jamal Ouenniche
Prof. Javier Ramirez Rodriguez
Prof. Bhaba R. Sarker
Prof. R. Raghavendra Kumar Sharma
Prof. Andranik Tangian
Prof. Etsuji Tomita
Dr. Delfim F. M. Torres
Prof. Evangelos Triantaphyllou
Dr. Manish Verma
Prof. Yi-Min Xie
Dr. Jiping Yang
Dr. Bin Zhang

Subject Coverage

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

1. Operations Research and Optimization Theory and Research Technical Approaches

Computational Intelligence and Information Management
Continuous Optimization
Discrete Optimization
Decision Support Systems, Multi-criteria Decision Methods, DEA, AHP
Expert systems
Heuristics Mathematical Programming, Networks
Queues
Simulation
Stochastic Models and Statistics
Time Series Analysis

2. Manufacturing and Service Operations Research

Forecasting
Inventory
Location
Logistics,Transportation Warehousing andMaintenance
Product and Service Design Project management Planning and Scheduling
Quality Management Revenue Management Supply Chain Management

3. Interfaces with Other Disciplines Community Operations Research

Education Operations Research Environmental and Energy Issues Financial Engineering
Government Operations Research
Health ServicesOperations Research
Marketing Science
Military and Homeland Security
Operations Research in Nonprofit Organization Policy Modeling and Public Sector OR
Productivity and Efficiency in the Public Sector
Sports Operations Research
Telecommunications and Networking

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 AJOR.

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/ajor E-mail: ajor@scirp.org

American Journal of Operations Research, 2011, 1, 25-72
Published Online June 2011 in SciRes (http://www.SciRP.org/journal/ajor/).

TABLE OF CONTENTS

Volume 1 Number 2 **June 2011**

Component-Oriented Reliability Analysis Based on Hierarchical Bayesian Model for an Open Source Software
Y. Tamura, H. Takehara, S. Yamada 25

Extracting a Heterogeneous Social Network of Academic Researchers on theWeb Based on Information Retrieved from Multiple Sources
R. M. Alguliev, R. M. Aliguliyev, F. S. Ganjaliyev 33

A Multi-Objective Obnoxious Facility Location Model on a Plane
U. K. Bhattacharya 39

Optimal Policy and Simple Algorithm for a Deteriorated Multi-Item EOQ Problem
B. Zhang, X. Y. Wang 46

A Museum Cost Sharing Problem
Y. T. Wang 51

Visualizing Investment Decision on Decision Balls
L.-C. Ma 57

Evaluating the Performance of Iranian Football Teams Utilizing Linear Programming
J. Soleimani-Damaneh, M. Hamidi, N. Sajadi 65

Copyright © 2011 SciRes.