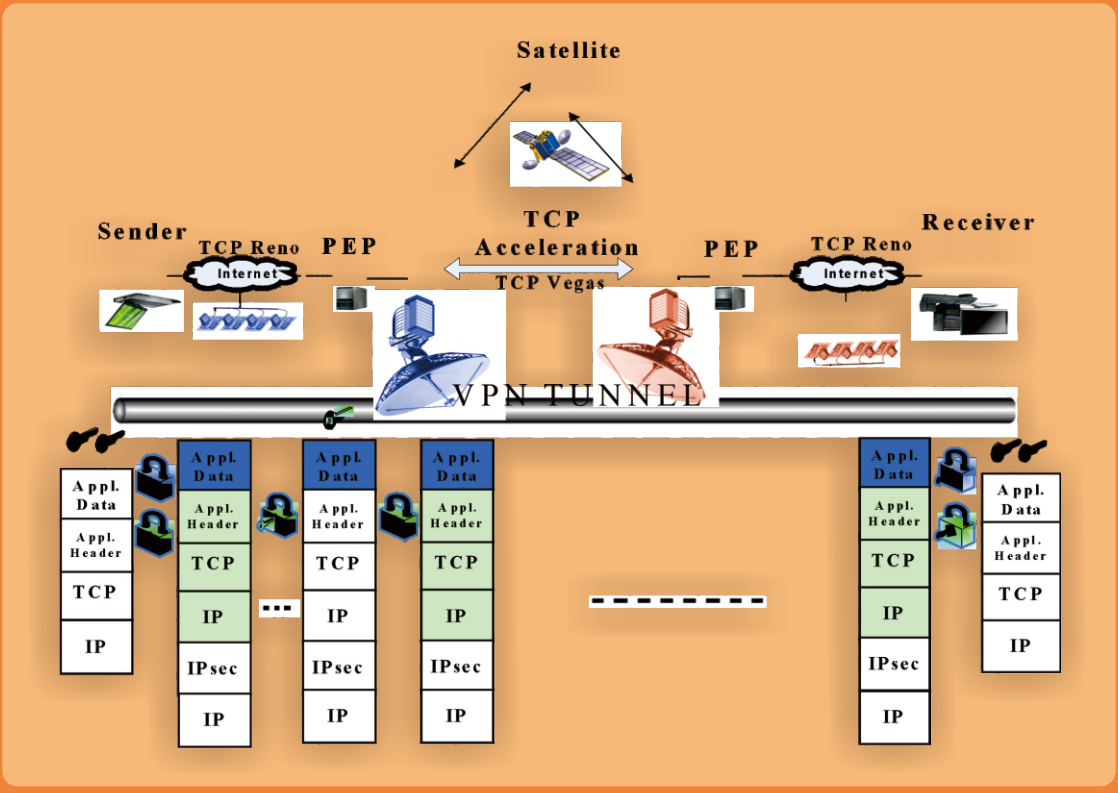
Scientific Research

International Journal of Communications, Network and System Sciences

ISSN: 1913-3715
Volume 5, Number 4, April 2012



ISSN: 1913-3715

www.scirp.org/journal/ijcns/

JOURNAL EDITORIAL BOARD

ISSN 1913-3715 (Print) ISSN 1913-3723 (Online)
http://www.scirp.org/journal/ijcns/

Editor-in-Chief

Prof. Boris S. Verkhovsky New Jersey Institute of Technology, USA

Editorial Board

Dr. Habtamu Abie Norwegian Computing Center, Norway
Prof. Andranik S. Akopov National Research University, Russia
Prof. Sabri Arik Istanbul University, Turkey
Prof. Satya Atluri University of California, Irvine, USA
Prof. Ko Chi Chung National University of Singapore, Singapore
Prof. Daniel B. da Costa Federal University of Ceara, Brazil
Dr. Franca Delmastro National Research Council, Italy
Prof. Sasa Divjak Ljubljana University, Slovenia
Prof. Md. B. El-Mashade Al-Azhar University, Egypt
Prof. Kurt J. Engemann Iona College, USA
Prof. Morteza Esmaeili Isfahan University of Technology, Iran
Prof. David J. Farber Carnegie Mellon University, USA
Prof. George Ghinea Brunel University, UK
Prof. Richard Tabor Greene Keio University, Japan
Prof. William Gruver Simon Fraser University, Canada
Prof. Ehud Gudes Ben-Gurion University of the Negev, Israel
Prof. H. Barry Harrison Griffith University, Australia
Dr. Zhiyi Huang University of Otago, New Zealand
Prof. Anca D. Ionita University "Politehnica" of Bucharest, Romania
Prof. Hiroaki Ishii Kwansei Gakuin University, Japan
Dr. Markus Jakobsson PayPal, USA
Dr. Chris Joslin Carleton University, Canada
Dr. Dimitri Kanevsky IBM T. J. Watson Research Center, USA
Prof. Jozef Kelemen Silesian University, Czech Republic
Prof. Alexander Korsunsky Oxford University, UK
Prof. Felipe Lara-Rosano National Autonomous University of Mexico, Mexico
Prof. Shahram Latifi University of Nevada, Las Vegas, USA
Dr. Nicola Mastronardi National Research Council, Italy
Prof. Lyudmila Mihaylova Lancaster University, UK
Prof. Peter Planinsic University of Mirabor, Slovenia
Prof. Yuriy S. Polyakov US Poly Research, USA
Prof. Jianbin Qiu Harbin Institute of Technology, China
Dr. Kosai Raoof Joseph Fourier University, France
Prof. Gerhard Ritter University of Florida, USA
Dr. Ashok N. Rudrapatna Bell Labs, Alcatel-Lucent, USA
Prof. Sartaj K. Sahni University of Florida, USA
Prof. Abdul Sattar Griffith University, Australia
Prof. Innokentiy V. Semushin Ulyanovsk State University, Russia
Prof. Alexander Shananin Moscow Institute of Physics and Technology, Russia
Prof. Yurii I. Shokin Russian Academy of Sciences, Russia
Prof. Sergei Silvestrov Mälardalen University, Sweden
Dr. Maolin Tang Queensland University of Technology, Australia
Prof. Christoph Thuemmler Edinburgh Napier University, UK
Prof. Hans Uszkoreit Saarland University, Germany
Dr. Hrishikesh Venkataraman Dublin City University, Ireland
Prof. Lotfi Zadeh University of California, Berkeley, USA

Int. J. Communications, Network and System Sciences, **2012, 5, 207-242**
Published Online April 2012 in SciRes (http://www.SciRP.org/journal/ijcns/)

TABLE OF CONTENTS

Volume 5 Number 4 April 2012

Review of the Book "Advanced Cognitive Radio Network"

F. Zirilli……207

Improved Balas and Mazzola Linearization for Quadratic 0-1 Programs with Application in a New Cutting Plane Algorithm

W. Gharibi……208

Extending Instrumental Variable Method for Effective Economic Modelling

S. Zheng, X. Jin, W. Zheng……213

An Efficient Space-Time Coding Scheme for Time Dispersive MIMO Channels

S. A. Alkhawaldeh……218

A Class of Constacyclic Codes over $R + vR$ and Its Gray Image

D. J. Liao, Y. S. Tang……222

E2E KEEP: End to End Key Exchange and Encryption Protocol for Accelerated Satellite Networks

H. Fereidooni, H. Taheri, M. Mahramian……228

Radar Signal Recognition by CWD Picture Features

E. T. Tavakoli, A. Falahati……238

The figure on the front cover is from the article published in Int. J. Communications, Network and System Sciences, 2012, Vol. 5, No. 4, pp. 228-237 by Hossein Fereidooni, Hassan Taheri and Mehran Mahramian.

Copyright © 2012 SciRes.

International Journal of Communications, Network and System Sciences (IJCNS)

Journal Information

SUBSCRIPTIONS

The *International Journal of Communications, Network and System Sciences* (Online at Scientific Research Publishing, www.SciRP.org) is published monthly by Scientific Research Publishing, Inc., USA.

Subscription rates:

Print: $79 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©2012 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: ijcns@scirp.org

Call for Papers

International Journal of Communications, Network and System Sciences (IJCNS)

ISSN 1913-3715 (Print) ISSN 1913-3723 (Online)
http://www.scirp.org/journal/ijcns

IJCNS is an international refereed journal dedicated to the latest advancement of communications and network technologies. The goal of this journal is to keep a record of the state-of-the-art research and promote the research work in these fast moving areas.

Editor-in-Chief

Prof. Boris S. Verkhovsky — New Jersey Institute of Technology, USA

Subject Coverage

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

Ad Hoc and Mesh Networks	Network Protocol, QoS and Congestion Control
Coding, Detection and Modulation	Network Survivability
Cognitive Radio	Next Generation Network Architectures
Communication Networks Architecture Design	Reconfigurable Networks
Communication Reliability and Privacy	Resource Management
Communication Security and Information Assurance	Satellite Communication
Cooperative Communications	Sensor Networks
Embedded Distributed Systems	Simulation and Optimization Tools
Global Networks	UWB Technologies
Heterogeneous Networking	Wave Propagation and Antenna Design
MIMO and OFDM Technologies	Wireless Personal Communications

We are also interested in:

- Short reports—Discussion corner of the journal:
  2-5 page papers where an author can either present an idea with theoretical background but has not yet completed the research needed for a complete paper or preliminary data.
- Book reviews—Comments and critiques.

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/ijcns E-Mail: ijcns@scirp.org