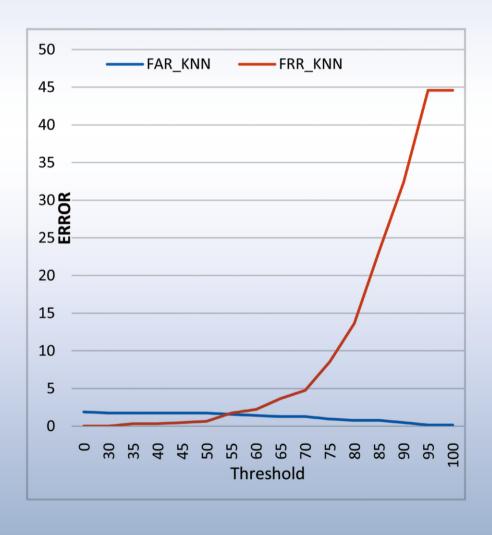




# Journal of Computer and Communications





## **Journal Editorial Board**

ISSN: 2327-5219 (Print) ISSN: 2327-5227 (Online)

http://www.scirp.org/journal/jcc

#### Editor-in-Chief

Prof. Vicente Milanés INRIA, France

#### **Editorial Board**

**Dr. Sangeeta Ahuja** IASRI (ICAR), India

Dr. Rafid Al-Khannak Buckinghamshire New University, UK

Dr. Orlando AyalaOld Dominion University, USADr. Ashraf DarwishThe University of Helwan, EgyptDr. Vahid DehghanianUniversity of Calgary, Canada

**Dr. Qiang Duan** Pennsylvania State University Abington College, USA

Prof. Gregory Grigoropoulos National Technical University of Athens, Greece

Prof. William Edward Hammond Duke Health Technology Solutions, USA

Dr. Fei Huang Microsoft, USA

**Dr. Dariusz Jacek Jakóbczak**Technical University of Koszalin, Poland

**Dr. Sunny Jung Kim**Dartmouth College, USA

Prof. Mikel Larrea University of the Basque Country UPV/EHU, Spain

**Dr. Khalid Latif**University of Turku, Finland**Prof. Gino Jinho Lim**University of Houston, USA

**Dr. Lai Man Po**City University of Hong Kong, Hong Kong (China)

Prof. Zengchang Qin Beijing University of Aeronautics and Astronautics, China

Prof. Sukumar SenthilkumarVellore Institute of Technology-University, IndiaDr. R. SharmaIndian Institute of Technology Madras, India

**Prof. John A. Springer** Purdue University, USA

**Dr. Wei Wei** Xi'an University of Technology, China

**Prof. Wei Yu** Towson University, USA



Volume 6

Number 3

ISSN Online: 2327-5227 ISSN Print: 2327-5219

March 2018

#### **Table of Contents**

### Design and Implementation of Fingerprint Identification System Based on KNN Neural Network Ubiquitous Computing and Its Applications in the Disease Management in a Ubiquitous City Deployment of Soft Skills for Effective Customer Service in the 21st Century Library Short-Term Financial Time Series Forecasting Integrating Principal Component Analysis and Independent Component Analysis with Support Vector Regression Identity-Based Steganography in Spatial Domain A Modified and Secured RSA Public Key Cryptosystem Based on "n" Prime Numbers A Semiotic Analysis of Programming Languages R. M. Gazoni 91 Performance of Polar Codes for OFDM-Based UWB Channel

D. E. El. Matary, E. A. Hagras, H. M. Abdel-Kader......102

A Lightweight MVC Framework Based on Code Decoupling Principle

A Case Study on Security Recommendations for a Global Organization

# Journal of Computer and Communications (JCC) Journal Information

#### **SUBSCRIPTIONS**

The *Journal of Computer and Communications* (Online at Scientific Research Publishing, <a href="www.SciRP.org">www.SciRP.org</a>) is published monthly by Scientific Research Publishing, Inc., USA.

#### Subscription rates:

Print: \$39 per issue.

To subscribe, please contact Journals Subscriptions Department, E-mail: <a href="mailto:sub@scirp.org">sub@scirp.org</a>

#### **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 © 2018 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 © 2018 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: jcc@scirp.org

# Call for Papers

# Journal of Computer and Communications

ISSN: 2327-5219 (Print) ISSN: 2327-5227 (Online)

http://www.scirp.org/journal/jcc



Journal of Communications and Computers is an international journal dedicated to the latest advancement of communications and computers. 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 computer and communications. All manuscripts must be prepared in English, and are subject to a rigorous and fair peer-review process. Accepted papers will immediately appear online followed by printed hard copy. The journal publishes original papers including but not limited to the following fields.

#### Subject Coverage

The journal publishes original papers including, but not limited to, the following fields:

- Applications of Communication Systems
- Artificial Intelligence
- Big Data Search and Mining
- Cloud Computing
- Communication Protocols
- Complex Network Models
- Computational Robotics
- Computer and Network Security
- Computer Graphics and Visualization
- Computer Vision
- Cooperative Communications
- Distributed Computing
- Green Networking
- Grid Computing
- High Performance Computing
- Image Processing

- Information and Communication Theory and Algorithms
- Information and Communication: Security, Privacy, and Trust
- Information Retrieval
- Mobile and Portable Communications Systems
- Mobile and Ubiquitous Networks
- Mobile Computing Systems
- Multimedia/Signal Processing
- Network Modeling and Simulation
- Numerical Methods
- Online Social Network Computing
- Optical Communications
- Self-Stabilization, Autonomic Computing
- Simulation/Analytical Evaluation of Communication Systems

We are also interested in: 1) Short Reports – 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; 2) Book Reviews – Comments and critiques.

Website and E-Mail

http://www.scirp.org/journal/jcc E-mail: jcc@scirp.org

#### What is SCIRP?

Scientific Research Publishing (SCIRP) is one of the largest Open Access journal publishers. It is currently publishing more than 200 open access, online, peer-reviewed journals covering a wide range of academic disciplines. SCIRP serves the worldwide academic communities and contributes to the progress and application of science with its publication.

#### What is Open Access?

All original research papers published by SCIRP are made freely and permanently accessible online immediately upon publication. To be able to provide open access journals, SCIRP defrays operation costs from authors and subscription charges only for its printed version. Open access publishing allows an immediate, worldwide, barrier-free, open access to the full text of research papers, which is in the best interests of the scientific community.

- · High visibility for maximum global exposure with open access publishing model
- Rigorous peer review of research papers
- Prompt faster publication with less cost
- Guaranteed targeted, multidisciplinary audience





Website: http://www.scirp.org Subscription: sub@scirp.org Advertisement: service@scirp.org