

ISSN: 2327-5219

Volume 13, Number 5, May 2025



Journal of Computer and Communications



ISSN: 2327-5219



<https://www.scirp.org/journal/jcc>

Journal Editorial Board

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

<https://www.scirp.org/journal/jcc>

Editor-in-Chief

Prof. Zengchang Qin

Beijing University of Aeronautics and Astronautics, China

Editorial Board

Prof. Harald Øverby	Norwegian University of Science and Technology, Norway
Dr. Sangeeta Ahuja	IASRI (ICAR), India
Dr. Rafid Al-Khannak	Buckinghamshire New University, UK
Dr. Orlando Ayala	Old Dominion University, USA
Dr. Doina Bein	California State University, USA
Dr. Janusz Bobulski	Czestochowa University of Technology, Poland
Dr. Ashraf Darwish	The University of Helwan, Egypt
Dr. Calandra Davide	University of Turin, Italy
Dr. Vahid Dehghanian	University of Calgary, Canada
Dr. Qiang Duan	Pennsylvania State University Abington College, USA
Dr. Cai Gao	Walmart Global Tech, USA
Dr. Jordi Garcia Alminana	UPC BarcelonaTech, Spain
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. Abbas Khosravi	Deakin University, Australia
Prof. Hyunsung Kim	Kyungil University, South Korea
Dr. Sunny Jung Kim	Dartmouth College, USA
Prof. Mikel Larrea	University of the Basque Country UPV/EHU, Spain
Prof. Lai Soon Lee	Universiti Putra Malaysia, Malaysia
Dr. Guowei Lei	Jimei University, China
Prof. Gino Jinho Lim	University of Houston, USA
Prof. Yang Liu	Qingdao University of Science and Technology, China
Dr. Lai Man Po	City University of Hong Kong, Hong Kong (China)
Dr. Zhiliang Qin	Shandong University, China
Dr. Abolfazl Razi	Northern Arizona University, USA
Prof. Christoph Reich	Furtwangen University, Germany
Prof. Sukumar Senthilkumar	Vellore Institute of Technology-University, India
Prof. Durga Prasad Sharma	University of Maryland, India
Dr. R. Sharma	Indian Institute of Technology Madras, India
Dr. Md. Habibur Rahman Sobuz	Khulna University of Engineering and Technology, Bangladesh
Prof. John A. Springer	Purdue University, USA
Dr. Mohammad Taleghani	Islamic Azad University (Rasht Branch), Iran
Dr. Vijayakumar Varadarajan	The University of New South Wales, Australia
Dr. T. Velmurugan	Dwaraka Doss Goverdhan Doss Vaishnav College, India
Dr. Wei Wei	Xi'an University of Technology, China
Prof. Changjin Xu	Guizhou University of Finance and Economics, China
Prof. Wei Yu	Towson University, USA
Prof. Jianwei Zhao	Rocket Force University of Engineering, China

Table of Contents

Volume 13 Number 5

May 2025

A Review of Intelligent Optimization Algorithms in Supply Chain Networks

N. L. Zhang, F. R. Xie..... 1

Software for a Novel Fuzzy Time Series Forecasting Model Based on Balanced Tree Data Structures

T. H. B. C. Tavares, B. P. Ferreira, E. M. A. M. Mendes..... 13

Advancing Glioblastoma Prognosis: A Review of Machine Learning, Radiomics, and Multi-Omics Integration for Survival Prediction and Subtyping

M. Awel, R. Dave, M. Bhavsar..... 29

Hyperledger Fabric Blockchain-Based Approach towards Secured Port Weighbridge Systems

N. Zacharia, N. D. Kimario, O. O. Mwambe, I. G. Tende..... 46

Cross-Regional Analysis of Global AI Healthcare Regulation

P. Ullagaddi..... 66

Prototyping Large Language Model from Scratch as 1st Line Customer Engagement & Support Tool

I. K. Ng, O. Y. Q. Koh, J. L. Tan, T. M. Lim 84

Evaluating the Impact of Carrier Aggregation on LTE Performance in Zambian Urban

T. L. Phiri, K. Simukonda, T. Malama 101

Journal of Computer and Communications (JCC)

Journal Information

SUBSCRIPTIONS

The *Journal of Computer and Communications* (Online at Scientific Research Publishing, <https://www.scirp.org/>) is published monthly by Scientific Research Publishing, Inc., USA.

Subscription rates:

Print: \$59 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 © 2025 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 © 2025 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

Journal of Computer and Communications

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

<https://www.scirp.org/journal/jcc>



Journal of Computer and Communications 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

<https://www.scirp.org/journal/jcc>

E-mail: jcc@scirp.org