

ISSN: 2327-5219

Volume 13, Number 9, September 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

Prof. Adrian David Cheok

Nanjing University of Information Science and Technology, Australia

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. 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 9

September 2025

Application of the K-Means Algorithm in the Study of Influenza Transmission Patterns

S. Y. Ye 1

A Transitional QoE Model Framework for 5G and beyond Networks

V. Surya 13

A Study and Practice of Singing Voice Conversion Based on E-SVS and R-SVC

F. M. H. Dong 42

SmartCare: A Mobile Application for Improving Medication Adherence, Elderly Location Tracking, and Disease Management

S. A. A. Ababtain, S. A. M. Alsubhi, Y. A. Maklad, H.-N. Tran, C.-H. Jin, A. S. Maklad 55

Improving the Performance of a Data-Driven Intelligent Model for Intrusion Detection in IoT Networks

S. Nguendap, E. Fotsing, A. Nzeukou, J. P. Lienou 77

Driver Drowsiness Detection Based on Eye Blinking Using Convolutional Neural Network Approach

M. Kumar, M. Rahman, J. Khan, A. S. M. M. Rahman 104

Cybersecurity Modeling: Application of Optimization in Machine Learning-Based Detection Systems

G. A. Odiaga, N. Masinde, C. Yoga 121

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.

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