Informing Science:
the International Journal of an Emerging Transdiscipline

An Official Publication of the Informing Science Institute
InformingScience.org

Inform.nu

Volume 28, 2025

Senior Editor-in-Chief: Eli Cohen, Informing Science Institute (USA)
Editor-in-Chief: Francesco Tommasi, University of Verona (Italy)
Publisher: Elizabeth Boyd, Informing Science Institute (USA)

Editors:

Grandon Gill, University of South Florida (USA)
Robert Hammond, University of South Florida (USA)
Gaetano R Lotrecchiano, George Washington University (USA)
Mathews Nkhoma, RMIT University (Australia)

Associate Editors:

Luca Menghini, University of Padova (Italy)

The purpose of the journal **Informing Science** is to provide a better understanding of fields that inform their clientele. These fields include information systems, library science, journalism in all its forms, and education. Even though these fields developed separately and are taught across campus, they are evolving into the new discipline of **Informing Science**.

Informing Science publishes articles that provide insight into how best to inform clients using information technology. Authors may use epistemologies from engineering, computer science, education, psychology, business, anthropology, and such. The ideal paper will serve to inform fellow researchers, perhaps from other fields, of contributions to this problem.

Informing Science is an academically peer-reviewed open-access journal. All submissions are blind refereed by three or more peers. Articles are published online on the web site **http://inform.nu**

The Informing Science journal is listed in Cabell's Directory of Publishing Opportunities in Educational Curriculum & Methods, Cabell's Directory of Publishing Opportunities in Educational Technology & Library Science, Cabell's Directory of Publishing Opportunities in Management, EBSCO, Information Science Abstracts, INSPEC, Directory of Scholarly Electronic Journals and Academic Discussion Lists, Ulrich's Periodicals Directory.

(CC BY-NC 4.0) The articles in this journal are licensed under a Creative Commons Attribution-NonCommercial 4.0 International License. When you copy and redistribute this paper in full or in part, you need to provide proper attribution to it to ensure that others can later locate this work (and to ensure that others do not accuse you of plagiarism). You may (and we encourage you to) adapt, remix, transform, and build upon the material for any non-commercial purposes. This license does not permit you to use this material for commercial purposes.

ISSN: online 1521-4672

Published by the Informing Science Institute
131 Brookhill Ct., Santa Rosa, California USA
phone: +1-707-537-2211
http://informingscience.org/

Informing Science: The International Journal of an Emerging Transdiscipline

Volume 28, 2025 – Table of Contents

(as of April 1, 2025)

ARTICLE #

Amusement as Key Motivation: Informing Client Needs in CMC Technologies for Enhanced Collaboration
Junghyun Nam 001

Special Series on Informing Clients and Security Issues in the Medical Domain
Guest Editors: **Dr. Satya Prakash Yadav, Prof. Dr. Fadi Al-Turjman, Prof. (Dr.) Victor Hugo C. de Albuquerque, Mr. Rohit Sahu 002**

Optimization of Healthcare Service Delivery Using Deep Genetic Algorithm
Girimurugan B, Ashvin T.K, Hemalatha T, Riyaz Hussain Sk, Sannidhan M S, Umaya Salma Shajahan 003

Predictive Modeling of Lung Cancer Disease Outcomes Using Ensemble Learning
Praveenadevi D. Sreekala S.P, Poonkuzhali L, V.S.S.P. Raju Gottumukkala, Jaazieliah R, Saravanan M 004

Reinforcement Learning for Adaptive Healthcare Decision Support Systems
Sreekala S. P, Mudit Saxena, Revathy S, Rajapriya M, Shanthi N. S, Saravanakumar S. 005

Optimizing Healthcare Resource Allocation Using Residual Convolutional Neural Networks
Buvaneswari R.P, Sathis Kumar M, Ravi Kumar K, Sandeep Kumar M, Rajeshwari S, Karunambiga K 006

Adversarial Attacks on Healthcare Deep Learning Model: Vulnerabilities and Defenses
Mekala A, Shahnaz Fatim, Subba Rao BV, Rajendra Prasad J, Banupriya P.G, Venkata Ramana K 007

Bayesian Optimization for Hyperparameter Tuning in Healthcare for Diabetes Prediction
Annapantula Sudhakar, Sujatha S, Sathiya M., Sivaramakrishnan A., Balambigai Subramanian, Venkata Ramana K 008

Optimizing Healthcare Service Delivery Using Improvised Fuzzy Logic Algorithm
Sarasu R, Sunil Kumar, Thomas M, John Philip Bhimavarapu, Shyamala L, Rolly Gupta 009

Temporal Graph Convolutional Networks for Predicting Disease Outbreaks in Public Health Surveillance
Denslin Brabin D.R, Shaik Mohammad Rafee, Pratheeksha Hegde N, Agitha W, Saravanan M, Subbulakshmi R 010

Differential Genetic Algorithm for Auto-Overlay of the Skull and Face and Mandible Articulation
Vishal Gangadhar Puranik, Vasudhevan V, Sunil Kumar, Kalpana C, Amutha J, Ramesh Babu P 011

Healthcare Biclustering of Predictive Gene Expression Using LSTM Based Support Vector Machine
Thulasi Bikku, Joy Elvine Martis, Sunil Kumar M, Sudha S, Iyappan P, Natarajan C 012

Central Line Associated Bloodstream Infection Prediction Using Deep Attention Nets in the Healthcare Field
Sushama C, Shaik Mohammad Rafee, Senthil Kumar A, Srilakshmi A, Subbulakshmi R, Balambigai Subramanian 013

Enhancing Healthcare Industrial Applications With LSTM-Based Predictive Analytics
Sushama C, Shaik Mohammad Rafee, Jaimala Jha, Sujatha S, Jagadeesan Srinivasan, Mohana Krishna I 014

Mapping the Landscape of Neuromarketing: A Bibliometric Analysis
Mredu Goyal, Mazharunnisa Md, Sunil Kumar, Kala I, Gamachu Fufa, Archana Devi S 015

Transfer Learning Techniques and Approaches for Predictive Modeling of Disease Outcomes
Mahalaxmi S.B.K. U, Kala I, Lalit Kumar Sagar, Thomas N, Ashish Kumar Kaushal, Nismon Rio Robert 016

Deep Learning Approach for Thyroid Medical Image Analysis and Prediction
Shaik Mohammad Rafee, Sreelatha P, Antonios Kalampakas, Jayaprakash M, Celine Kavida A, Yamini S 017

Ensemble Evolutionary Algorithm for Feature Selection and Classification in Healthcare Data Mining
Sathyasundari S, Saraswathi C, Arulini K, Rolly Gupta, Pradeepa K, Girimurugan B 018

Electronic Information Management Practices of Postgraduate LIS Students in Nigeria
Yemisi Tomilola Babalola, Tolulope Elizabeth Adenekan 019

Examining Psychological Mechanisms Underlying Synergistic Communication Effects: The Case of Online Reviews and Display Advertising
Rishi Dwesar, Ankita Sharma, Megha Tyagi 020