

International Journal on Perceptive and Cognitive Computing

Volume 11, Issue 2, Year 2025



IIUM
Press

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

ISSN: 2462 – 229X

<http://journals.iium.edu.my/aict/index.php/IJPCC>

INTERNATIONAL JOURNAL ON PERCEPTIVE AND COGNITIVE COMPUTING (IJPCC)

Vol. 11 No. 2 (2025): July 2025

DOI: <https://doi.org/10.31436/ijpcc.v11i2>

COPYRIGHT TRANSFER AGREEMENT

- 1. Consent to publish:** The Author(s) agree to publish the article named above with IIUM Press.
- 2. Declaration:** The Author(s) declare that the article named above has not been published before in any form and that it is not concurrently submitted to another publication, and also that it does not infringe on anyone's copyright. The Author(s) holds the IIUM Press and Editors of the journal harmless against all copyright claims.
- 3. Transfer of copyright:** The Author(s) hereby agree to transfer the copyright of the article to IIUM Press, which shall have the exclusive and unlimited right to publish the article in any form, including in electronic media. However, the Author(s) will reserve the right to reproduce the article for educational and scientific purposes provided that written consent of the Publisher is obtained.

The International Journal on Perceptive and Cognitive Computing (IJPCC) journal follows the open access policy.

All articles published open access will be immediately and permanently free for everyone to read, download, copy and distribute for non-commercial purposes.

Editorial Team

Position	Name	Affiliation
Chief Editor	Amelia Ritahani Ismail	International Islamic University Malaysia
Editor	Adamu Abubakar Ibrahim	International Islamic University Malaysia
Technical Editor	Norsaremah Salleh	International Islamic University Malaysia
Language Editor	Ahsiah Ismail	International Islamic University Malaysia
Language Editor	Hafizah Mansor	International Islamic University Malaysia
Copy Editor	Noor Azura Zakaria	International Islamic University Malaysia
Copy Editor	Azlin Nordin	International Islamic University Malaysia
Editorial Committee Member	Ali Alwan	Ramapo College of New Jersey, USA
Editorial Committee Member	Rawad Abdulghafor	Arab Open University – Oman
Editorial Committee Member	Andri Pranolo	Universitas Ahmad Dahlan, Indonesia

Editorial Committee Member	Andi Fitriah Abdul Kadir	International Islamic University Malaysia
Editorial Committee Member	Hamwira Yaacob	International Islamic University Malaysia
Editorial Committee Member	Zainab Senan Mahmod Attar Bashi	International Islamic University Malaysia
Editorial Committee Member	Sherzod Turaev	United Arab Emirate University, UAE
Editorial Committee Member	Messikh Azzeddine	Semiconductors Technology Research Center for Energetics, Algiers, Algeria
Editorial Committee Member	Untung Rahardja	Universitas Raharja, Indonesia
International Committee Board	Ruhul A. Sarker	UNSW Canberra, Australia
International Committee Board	Iftikhar Sikder	Cleveland State University, USA
International Committee Board	Chehri Abdellah	University of Ottawa, Canada
International Committee Board	Muhammad Mostafa Monowar	King Abdul Aziz University, KSA
International Committee Board	Riadh Robbana	INSAT-Carthage University, Tunisia
International Committee Board	Mohammed Atiquzzaman	University of Oklahoma, USA
International Committee Board	AbdulRahman Alsamman	University of New Orleans, USA
International Committee Board	Mahfuz Aziz	University of South Australia, Australia
International Committee Board	Mostafa M. Fouda	Benha University, Egypt
International Committee Board	Md Mahbubur Rahim	Monash University, Australia
International Committee Board	Zubair Md. Fadlullah	Tohoku University, Japan
International Committee Board	Qurban A. Memon	UAE University, UAE
International Committee Board	Riaz Ahmed Shaikh	King Abdul Aziz University, KSA
International Committee Board	Mohammad Abdul Salam	Southern University and A&M College, USA
International Committee Board	Mohamed Essaaidi	Mohammed V University, Morocco
International Committee Board	Alaa Hussein Al-Hamami	Aman Arab University, Jordan
International Committee Board	Hilal M. Yousif Al-bayatti	Applied Science University, Bahrain
International Committee Board	Siddeeq Y. Ameen	University of Mosul, Iraq
International Committee Board	Ismail Khalil	Institute of Telecooperation, Johannes Kepler University Linz, Austria

TABLE OF CONTENT

Title	Pages
Zainab Senan Mahmod Attar Bashi, Atikah Balqis Basri, Shayma Senan Unified Secure Access Service Edge (SASE): Transforming Security for Hybrid Workforce and Multi-Cloud Environments	1-7
Haruna Chiroma A Framework Combining YOLOv2 and Motion-Adaptive Inference with Multiple Data Splits for Waste Management in Smart Sustainable City	8-13
Normi Sham Awang Abu Bakar, Siti Zulaikha Yusof, Muhammad Syabil Irfan LUNA: Bridging communication with sign language translation	14-21
Muhammad Aiman Haris Bin Muhamad Suwaid, Muhammad ‘Ilyas Amierrullah Ab Karim, Raini Hassan, Azni Abdul Aziz Automated Classification of Celestial Objects Using Machine Learning	22-41
Adeleye Dupe Ayesha, Abd. Rahman Ahlan, Najhan Muhamad. Ibrahim, Mahfooz Ahmed Impact and Challenges of E-Government Implementation in Nigeria: A Systematic Literature Review	42-57
Aiman Syahmi Ahmad Sabri, Akeem Olowolayemo, Ahmad Badruddin Ghazali, Ibrahim Muhammad, Fatimoh Damola Saliu-Olajo Detection of Errors in Bitewing X-Ray Images Using Deep Learning	58-68
April Firman Daru, Alauddin Maulana Hirzan, Muhammad Alfian Badrud Duja, Paminto Agung Christianto Implementation of Fuzzy Tsukamoto on Node MCU ESP8266 to optimize monitoring of water flow in pipes	69-76
Nurul Syahina Mohamed, Akeem Olowolayemo, Fatimoh Damola Saliu-Olajo, Ibrahim Muhammad Muhammad Myfinancial Controller: A First Usability Review	77-85
Mohamad Razif Arman Rizuwan, Muhammad Khalis Mohd Zakaria, Ariff Rostam Haikqal Subahir, Tunku Muhsin Hasni Tunku Moha, Ahmad Azzam Abdul Jamil, Ahmad Anwar Zainuddin Scalable and Sustainable Blockchain Architecture: Advancing Security, Efficiency, and Cross-Chain Interoperability	86-94
Sue Voon Loke A Lightweight Authenticated Cipher For Resource Constrained Environment	95-102
Maan Maan Younus Al-fathi Implement Hybrid Algorithm to decrease localization error in Wireless Sensor Network	103-110
Siti Nur Syamimi Zailan, Mohamad Fauzan Noordin Developing An Information Quality Model For Social Media Based On Madani Al-Farabi's Concept: A Study In Malaysia	111-125
Siti Nur Syamimi Zailan, Mohamad Fauzan Noordin The Study of Social Media Contribution to Knowledge Sharing in Maqasid Al-Shariah	126-138
Wan Azlena Wan Mohamad, Noor Hayani Abd Rahim, Nurul Nuha Abdul Molok Event-Based Cybersecurity Risk Assessment: Identifying Potential Cyber-Attacks in Organisations	139-145
Ubair Noor, Raini Hassan, Dini Oktarina Dwi Handayani Efficient Skyline Query Processing in Incomplete Graph Databases Using Machine Learning Techniques	146-161
Hasan Khair Adzman, Raini Hassan, Dini Oktarina Dwi Handayani Enhancing Skyline Query Processing on Large and Incomplete Graphs with Graph Neural Networks: A Hybrid Machine Learning Approach	162-172
Nur Nisa Humairah Rosdi, Amysha Qistina Amerolazuum, Nur Zafirah Adira Ahmadzamani, Ahmad Anwar Zainuddin Smart Contracts as Interoperability Bridges: A Literature Review of Blockchain Integration and Cross-Chain Communication	173-185