

2025 14th International Conference on Information Technology in Asia (CITA 2025)

**Kota Samarahan, Malaysia
5-6 August 2025**



**IEEE Catalog Number: CFP2554V-POD
ISBN: 979-8-3315-3850-7**

**Copyright © 2025 by the Institute of Electrical and Electronics Engineers, Inc.
All Rights Reserved**

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP2554V-POD
ISBN (Print-On-Demand):	979-8-3315-3850-7
ISBN (Online):	979-8-3315-3849-1

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

Table of Contents

Organising Committee

Reviewers

Full Papers

From Play to Plate: Usability Testing of the All You Can Eat (AYCE) Educational Game.....	1
<i>Nooralisa Mohd Tuah, Soffri Yussof, Noreena Yi-Chin Liu, Aleksei Lavrov, Anna Lavrova, Aleksandr Volosiuk, Artem Smolin, Andrei Balkanskii</i>	
Signal Processing and Broadband Service Quality in Public Higher Education Institutions: Factors Influencing User Experience and Adoption.....	7
<i>Shelena Soosay Nathan, Sani Inusa Milala, Siti Noraiza Ab Razak, Mizani Mohamad Madon</i>	
Brush Buddies: Augmented Reality Dental Hygiene Interactive Book to Promote Oral Health Care Among Young Learners.....	13
<i>Salyani Osman, Muhammad Hafizuddin Norizan, Norazimah Awang, Amalia Mohamad, Azaliza Zainal, Marliza Abdul Malik</i>	
Positional analysis using Monocular Relative Depth and Angular Estimation	19
<i>Omkar Jois, Anup Prakash, Aadithya H Rao, Shreya B A, Shylaja S S</i>	
Rural School Network Infrastructure Analysis and Redesign for Meaningful Connectivity	24
<i>Marcella Peter, Khairunnisa Ibrahim, Gary Chee-Wyai Loh, Kim-Mey Chew</i>	
The Role of AI-Driven Support Systems in Reducing Nurse Turnover: A Systematic Review of Effectiveness and Perceptions.....	30
<i>Sin Yee Lee; Ee Xion Tan</i>	
Unveiling Patterns in Movies and TV Shows on Netflix: A Clustering-Based Analysis	36
<i>Xue Kang Chok, Siew Mooi Lim, Qi Xiang Choo, Hui Ying Chan</i>	
A Comparative Analysis of Topic Modelling Techniques for Malaysian Business News Data: LDA, NMF, Top2Vec, and BERTopic.....	42
<i>Vadrianey Asas, Sarah Samson Juan, Vianney Camellie Kerbun, Stephanie Chua, Jane Labadin, Evan Lau</i>	
Comparative Analysis of Lightweight BERT Models and Ensemble Benefits for Extractive Q&A	48
<i>Allistair Nallie anak Konsil, Stephanie Chua, Jacey Lynn Minoi</i>	
Comparative Study of Fusion Techniques for Multimodal Fake News Detection.....	54
<i>Idza Aisara Norabid, Noor Hafhizah Abd Rahim, Masita Abdul Jalil</i>	
Enhancing Feature Selection Stability with a Hierarchical Whale Optimization Algorithm	60
<i>Li Yu Yab, Noorhaniza Wahid, Rahayu A Hamid</i>	
A Reinforcement Learning-Based Dynamic Adaptive Gamification (DAG) Method for Online Employee Training	66
<i>Yogeswari Shabadurai, Fang-Fang Chua, Tek-Yong Lim</i>	
Leveraging netStethoscope for Enhanced Network Monitoring in Rural Malaysia.....	72
<i>Brandon Chong Kian Hua, Tariq Zaman, Khairuddin Ab Hamid, Gary Loh Chee Wyai, Cat Kutay</i>	

Gamification of Regional Tourism Engagement: Analysis and Design of a Web-Based Information System	78
<i>Johannes Hamonangan Siregar, Ruffman Iman Akbar, Augury El Rayeb, Chaerul Anwar, Suriati Khartini Jali, Mohamad Imran Bandan, Lim Phei Chin, Abby Lian Hendrick</i>	
Smart Assistance for the Disabled: Design and Implementation of an Accessible Employment Service Platform Based on GPT Technology	84
<i>Xiangdong Chen, Heng Cui, Fan Wang, Tianshengnan Pan, PheiChin Lim</i>	
Anchor-Point Based Euclidean Reduction for Enhanced Instance-based Classification	90
<i>Mohammad Hossin; Abdul Muqtasid Rushdi</i>	
Real-time Bahasa Isyarat Malaysia Recognition System for Greeting Gestures	96
<i>Lim Phei Chin, Tyng Xin Sherene Saw, Suriati Khartini Jali, Johari Abdullah</i>	
YOLOv12-ECA: An Efficient Attention-Enhanced Detector for Real-Time UAV-Based Pothole Detection	102
<i>Siti Fairuz Mat Radzi, Mohd Amiruddin Abd Rahman, Muhammad Khairul Adib Muhammad Yusof</i>	
Pheromone-Guided University Timetable Construction using Ant Colony Optimization: A Case Study.....	108
<i>Mohammad Hossin, Abdul Muqtasid Rushdi, Nooralisa Mohd Tuah</i>	
ARRANGE: An Augmented Reality-Powered Mobile Application for Interactive Interior Design	114
<i>Ain Nazihah Pakasa, Nurlaila Rosli, Hael Rabbani Joseph</i>	
Exploring Large Language Models in Gamified Environments: A Systematic Literature Review	119
<i>Lleyton Geboh Leslie, Nurfaeza Jali, Sadok Ben Yahia, Cheah Wai Shiang, Syahrul Nizam Junaini</i>	