



SEUSL



JOURNAL OF **INFORMATION** & COMMUNICATION TECHNOLOGY

ISSN: 2961-5992

ABOUT

The Journal of Information and Communication Technology (JICT) is a peer-reviewed journal published by the Department of ICT, South Eastern University of Sri Lanka. It publishes high-quality research and practical contributions in information and communication technology, information systems, computer science, and related disciplines.



DEPARTMENT OF ICT
FACULTY OF TECHNOLOGY



JICT

VOLUME 04 ISSUE 01



 <https://www.seu.ac.lk/jict>

EDITORIAL BOARD

EDITOR IN CHIEF

Ms. A.R. Fathima Shafana

ASSOCIATE EDITORS

Mr. R. K. Ahmadh Rifai Kariapper

Ms. A. Fathima Musfira

EDITORIAL ASSISTANT

Mr. T. Nusky Ahamed

EDITORIAL ADVISORY BOARD

Prof. Dr. S.M. Junaideen	Vice Chancellor, SEUSL
Dr. U.L. Abdul Majeed	Faculty of Technology, SEUSL
Prof. Prasad M. Jayaweera	University of Sri Jayawardenapura
Prof. (Dr.) B.T.G.S. Kumara	Faculty of Applied Science, SUSL
Prof. S. Sabraz Nawaz	Faculty of Management and Commerce, SEUSL
Mr. A.L. Hanees	Faculty of Applied Sciences, SEUSL
Dr. S. Kirushanth	Faculty of Applied Sciences, University of Vavuniya
Dr. M.M. Mashroofa	Senior Assistant Librarian, SEUSL

LIST OF REVIEWERS

Dr. H.M.S.N. Ariyadasa, *Dept. of Computer Science and Informatics, UWU.*

Dr. M.M. Mohamed Mufassirin, *Dept. of Computer Science, SEUSL.*

Dr. S.H.D. Senanayake, *Dept. of Computer Science and Informatics, UWU.*

Mr. K. Muhammad Rifthy, *Dept. of ICT, SEUSL.*

Mr. M.J. Ahamed Sabani, *Dept. of ICT, SEUSL.*

Mr. R. K. Ahmadh Rifai Kariapper, *Dept. of ICT, SEUSL.*

Mr. R. Sakuntharaj, *Dept. of ICT, UoV.*

Mr. Uthayanathan Priyatharsan, *Dept. of ICT, SVIAS, EUSL.*

Ms. A. Fathima Musfira, *Dept. of ICT, SEUSL.*

Ms. A. Fathima Sharfana, *Dept. of ICT, SEUSL.*

Ms. K. Khedika, *Dept. of Computer Science, Trincomalee Campus, EUSL.*

Ms. N. Lojenaa, *Dept. of ICT, UoV.*

Ms. M.B. Fathima Sanjeetha, *Dept. of MIT, SEUSL.*

TABLE OF CONTENTS

1	A GIS and Machine Learning Based Predictive Framework for Optimizing Highway Bus Scheduling in Sri Lanka: A Systematic Literature Review	
	<i>G. A. Pramodaya, and R.M.K.T. Rathnayaka</i>	<i>1-12</i>
2	Blockchain-Based Early Warning System for Food Contamination Detection: Enhancing Food Safety through IoT and AI	
	<i>M.J. Ahamed Sabani and Anoshan Yoganathan</i>	<i>13-18</i>
3	AI-Based Non-Invasive VO₂max Estimation and Cardiovascular Risk Stratification: A Systematic Review	
	<i>P. D. Fonseka and C. Wijesiriwardana</i>	<i>19-30</i>
4	Data Mining with Privacy: A Review of Protection Techniques and Emerging Approaches	
	<i>C. Kosala Jayaweera, R.M. Nayanajith Rathnayaka and M.S. Shafana</i>	<i>31-37</i>
5	IoT-Based Environmental Monitoring and Smart Agriculture Prediction System using Machine Learning and Mobile Integration	
	<i>R.M.N. Rathnayaka and A. Mohamed Aslam Sujah</i>	<i>38-47</i>
6	Systematic Review of Automatic UML Diagram Generation	
	<i>Nimsha Fernando and C. Wijesiriwardana</i>	<i>48-58</i>
7	Applications of Artificial Intelligence in Spoilage Detection and Shelf-Life Estimation of Perishable Food: A Systematic Review	
	<i>Atheeya Azha Jakeer and M.F.F. Nuha</i>	<i>59 - 66</i>