



INTERNATIONAL CONFERENCE ON APPLIED AND PURE SCIENCES  
ICAPS 2023 – Kelaniya  
Faculty of Science, University of Kelaniya, Sri Lanka  
13<sup>th</sup> October 2023



**ICAPS**  
International Conference on Applied  
and Pure Sciences | 2023

**Session: Software Intensive Systems 01-01**

**Track: Software Intensive Systems**

**Venue: A11 - 201**

**Session Chair 1:** Dr. S. P. Pitigala

**Session Chair 2:** Dr. Dilani Wickramaarachchi

**Moderator :** Ms. M. M. V Senanayaka

**Shadow Moderator:** Mr. W. P. D. Sathsara

Abstract Paper ID	Abstract Submission ID	Session ID	Paper Title	Presenting Author	Time (p.m.)
SO-01	92	SO-01-01	Optimising the power generation cost of microgrids using genetic algorithms - An analysis of the impact of crossover and mutation rates	S. S. K. A De Silva	11.00 am - 11.15 am
SO-02	99	SO-01-02	Machine learning model to predict bank customer's next expenditure with relevant merchant category	<u>A. M. K. H. Umayanga</u> and D. M. L. M. Dissanayake	11.15 am - 11.30 am
SO-03	120	SO-01-03	Enhancing usability in learning management systems: Exploring future prospects with virtual assistants	<u>G. P. Dushyanthika</u> and I. U. Hewapathirana	11.30 am - 11.45 am
SO-04	151	SO-01-04	Real-time system for place recognition by interpreting Sri Lankan sign language into text using machine learning approach	<u>J. D. K. N. Perera</u> and B. M. T. Kumarika	11.45 am - 12.00 pm
SO-05	188	SO-01-05	Capturing sentence-level positional data into N-gram profiles for document classification	<u>L. M. S. Gunasekara</u> and H. K. S. Premadasa	12.00 pm - 12.15 pm
SO-06	213	SO-01-06	Embedded scoring methodology for the self - Assessment of the privacy and security concerns in telemedicine systems in Sri Lanka	<u>V. T. N. S. Siriwardhana</u> , P. S. Mallikarachchi and S. M. Vidanagamachchi	12.15 pm - 12.30 pm
SO-07	218	SO-01-07	A machine learning approach to predict profitable vegetable crop and land requirements in Sri Lankan agriculture	<u>S. A. H. Nethmini</u> and W.A.C Weerakoon	12.30 pm - 12.45 pm
SO-08	224	SO-01-08	QUBO formulation of the closest string problem	<u>D. M. C. Dissanayake</u>	12.45 pm - 1.00 pm
SO-09	210	SO-01-09	Enhancing optical flow for a smoother identification of global motion	<u>C. R. Algama</u> and K.D Sandaruwan	1.00 pm – 1.15 pm