

# ICGEC-2024

**The 16<sup>th</sup> International Conference on  
Genetic and Evolutionary Computing**

**August 28-29, 2024**

**Miyazaki Kanko Hotel, Miyazaki, Japan**

## **Conference Program**



**宮崎大学**  
University of Miyazaki



**Springer**

**ICGEC 2024 Official Website: <https://icgec24.github.io/>**

## Conference Schedule (Tentative) – Day 1

Time	August 28, 2024 (Wednesday) Miyazaki Kanko Hotel: All Venues, 2F, East Wing		
8:30   9:00	Registration		
9:00   9:10	Opening Ceremony (Room: HIMUKA)		
9:10   9:40	Keynote Speech (I) <i>Professor Tsuyomu Ikenoue,</i> President, Kyushu Medical Science University, Japan		
9:45   10:15	Keynote Speech (II) <i>Professor Jeng-Shyang Pan,</i> Professor, Nanjing University of Information Science and Technology, China		
10:15   10:30	Coffee Break		
10:30   11:00	MATLAB Workshop <i>Misa Taguchi</i> Application Engineering Group, MathWorks Japan		
11:00   12:00	Oral Session - 1  Multimedia Data Processing I (Room: HIMUKA)	Oral Session - 2  Data Governance and Digital Transformation: Technologies and Applications (Room: ONIJI-A)	
12:00   13:00	Lunch Buffet Restaurant “ICHIMOKU ISSOU” (2F, West Wing)		
13:00   15:00	Oral Session - 3  Multimedia Data Processing II (Room: HIMUKA)	Oral Session - 4  Digital Transformation Technologies and Artificial Computing I (Room: HATSUKARI)	Online Session  (Room: ONIJI-A)
15:00   15:15	Coffee Break		
15:15   17:00	Oral Session - 5  Circuit and Embedded System Design for Computing and Signal Processing Technology (Room: HIMUKA)	Oral Session - 6  Advanced Meta-Heuristic Optimization Algorithms and Applications (Room: HATSUKARI)	Oral Session - 7  Digital Transformation Technologies and Artificial Computing II (Room: ONIJI-A)
17:30   19:30	Banquet (Room: HEKIYOU)		

## Conference Schedule (Tentative) – Day 2

Time	<b>August 29, 2024 (Thursday)</b> <b>Miyazaki Kanko Hotel: All Venues, 2F, East Wing</b>	
8:30   8:45	Registration	
8:45   10:15	<b>Oral Session - 8</b> Intersection of Medical Technology, AI, IoT, and Big Data Analysis I (Room: HIMUKA)	<b>Oral Session - 9</b> Digital Transformation Technologies and Artificial Computing III (Room: HATSUKARI)
10:15   10:30	Coffee Break	
10:30   12:00	<b>Oral Session - 10</b> Intersection of Medical Technology, AI, IoT, and Big Data Analysis II (Room: HIMUKA)	<b>Oral Session - 11</b> Digital Transformation Technologies and Artificial Computing IV (Room: HATSUKARI)
12:00   13:00	<b>Lunch</b> <b>Buffet Restaurant “ICHIMOKU ISSOU” (2F, West Wing)</b>	
13:00   14:45	<b>Oral Session - 12</b> Multimedia Data Processing III (Room: HIMUKA)	<b>Oral Session - 13</b> Digital Transformation Technologies and Artificial Computing V (Room: HATSUKARI)
15:00   18:30	<b>Conference Excursion *</b> (Aoshima and Nichinan)	
18:30   20:30	<b>Farewell Party *</b> (Aoshima Restaurant @ Aoshima)	

\* Free shuttle buses will be provided for the participants of the Conference Excursion and Farewell Party (same participants from the excursion). After the Farewell party, the buses will send to hotels at Aoshima, Miyazaki City-Downtown, and University of Miyazaki.

## Program Detail (Tentative) on August 28

**Session 1**    Multimedia Data Processing I

**Date**            August 28, 2024 (Wednesday)

**Time**            11:00 – 12:00

**Room**            Miyazaki Kanko Hotel: 2F, East Wing (Room: HIMUKA)

**(1) Paper ID: ICGEC-2024-6**

**Statistical analysis of A-weighted sound pressure level for courtship song of robust cicada in Tokyo 2023**

*Leo Misono and Kenji Muto*

**(2) Paper ID: ICGEC-2024-8**

**Highly accurate image matching using inlier extraction of images via upper confidence bound policy**

*Mashiro Shimada and Hiroyuki Kamata*

**(3) Paper ID: ICGEC-2024-41**

**Blind Underwater Image Quality Assessment Using Ensemble of Vision Transformer**

*Nay Chi Lynn and Tetsuya Shimamura*

**(4) Paper ID: ICGEC-2024-49**

**Multi-channel Speech Enhancement Network Using Noise-Reference Microphone**

*Kota Suzuki, Yusuke Sugiura, and Tetsuya Shimamura*

**Session 2**    Data Governance and Digital Transformation: Technologies and Applications  
**Date**            August 28, 2024 (Wednesday)  
**Time**            11:00 – 12:00  
**Room**            Miyazaki Kanko Hotel: 2F, East Wing (Room: ONIJI-A)

- (1)    **Paper ID: ICGEC-2024-19**  
         **Toward Implementation of Autonomous Navigation with Accelerated Map Generation for High-Accuracy Landing on Unknown Celestial Bodies**  
         *Hiroaki Miura, Haruki Omori and Hiroyuki Kamata*
- (2)    **Paper ID: ICGEC-2024-61**  
         **Depiction of 3DCG Hula Dancers for Hula Costume Design CAD Development**  
         *Leona Kimura, Masatoshi Beppu, Satoshi Ikeda, Kaoru Ohe, and Makoto Sakamoto*
- (3)    **Paper ID: ICGEC-2024-44**  
         **MCTR--Relevant Citation Identification of Research Articles based on Metadata, Content, Theory Congruence and Mention Rates using Multiple Regression**  
         *Kyu Kyu Win and Yi Yi Hlaing*
- (4)    **Paper ID: ICGEC-2024-154**  
         **Construction and Accuracy Study of Agricultural Machinery Carbon Footprint Verification Model**  
         *Huan-Chang Lin Yu-Ching Chuang, Yung-Hsing Peng, Hung-Chi Wu, and Szu-Hsuan Wang*

**Session 3    Multimedia Data Processing II**

**Date**            August 28, 2024 (Wednesday)

**Time**            13:00 – 15:00

**Room**            Miyazaki Kanko Hotel: 2F, East Wing (Room: HIMUKA)

- (1)    **Paper ID: ICGEC-2024-11**  
**Towards Natural Gas Consumption Prediction by Deep Learning: Case Study in Several East-Europe Countries**  
*TuanAnh Nguyen and HongGiang Nguyen*
- (2)    **Paper ID: ICGEC-2024-64**  
**Optimized Block Size Valuation by Blockchain-based Hyperledger Fabric Network**  
*Khin Su Su Wai and Nwe Nwe Myint Thein*
- (3)    **Paper ID: ICGEC-2024-77**  
**Cloud Cost Prediction with LSTM on Parametric Data**  
*Khin Pyae Phyo San and Nwe Nwe Myint Thein*
- (4)    **Paper ID: ICGEC-2024-50**  
**Evaluation of Body Condition Score for walking dairy cows using 3D camera**  
*Masaya Chikunami, Thi Thi Zin, Masaru Aikawa, Ikuo Kobayashi*
- (5)    **Paper ID: ICGEC-2024-56**  
**Arrival Time Difference Estimation Based on GCC-PHAT for Multiple Loudspeakers**  
*Riku Kasakura, Yosuke Sugiura, and Tetsuya Shimamura*
- (6)    **Paper ID: ICGEC-2024-62**  
**A Study on Improvement of Operation Accuracy by Viewpoint Switching in VR**  
*Masatoshi Beppu, Leona Kimura, Kaoru Ohe, Satoshi Ikeda, and Makoto Sakamoto*
- (7)    **Paper ID: ICGEC-2024-68**  
**Utilizing Behavioral Features for Predicting Calving Time**  
*Wai Hnin Eaindrar Mg, Pyke Tin, Masaru Aikawa, Ikuo Kobayashi, Yoichiro Horii5, Kazuyuki Honkawa, Thi Thi Zin*
- (8)    **Paper ID: ICGEC-2024-169**  
**Auto Labeling for Liver CT Image Based on Edge Detection and Region of Interest Segmentation**  
*Jun-Yan Horng, Jiun-Huei Ho, Chun-Chih Lo, Chin-Shiuh Shieh, and Mong-Fong Horng*

**Session 4    Digital Transformation Technologies and Artificial Computing I**

**Date**            August 28, 2024 (Wednesday)

**Time**            13:00 – 15:00

**Room**           Miyazaki Kanko Hotel: 2F, East Wing (Room: HATSUKARI)

- (1)    **Paper ID: ICGEC-2024-14**  
**A Lightweight Approach for Identifying DDoS Attacks Using Boosting Models and Hybrid Feature Selection**  
*Soe Kalayar Naing and Tin Thein Thwel*
- (2)    **Paper ID: ICGEC-2024-17**  
**Proposal of a Document Layout Analysis Method Adopting Pre-processing Based on Document Image Classification**  
*Kanta Kakinoki and Tetsuro Katayama*
- (3)    **Paper ID: ICGEC-2024-40**  
**Context-Aware Personality Recognition from User Generated Text Using Deep Learning**  
*Zan Mo Mo Aung and Myo Khaing*
- (4)    **Paper ID: ICGEC-2024-45**  
**Monthly Weather Data Collection and Alert System using Time Series LSTM Model**  
*San Nyein Khine, Zaw Tun and Ye Naing*
- (5)    **Paper ID: ICGEC-2024-52**  
**Automated Cattle Identification via Image-Based Ear Tag Recognition** *Yuichiro Shimizu, Thi Thi Zin, Masaru Aikawa, and Ikuo Kobayashi*
- (6)    **Paper ID: ICGEC-2024-57**  
**Performance Evaluation of Edge Detectors for Automated Book Spine Segmentation in Library Bookshelf Images**  
*Myat Min Maung, Zu Zu Aung and Than Than Nwe*
- (7)    **Paper ID: ICGEC-2024-76**  
**Cattle Lameness Detection Using Leg Region Keypoints from a Single RGB Camera**  
*Bo Bo Myint, Thi Thi Zin, Masaru Aikawa, Ikuo Kobayashi<sup>3</sup> and Pyke Tin,*
- (8)    **Paper ID: ICGEC-2024-168**  
**A Smart Sensor for Gait Analysis of Rehabilitation Assessment**  
*Chang-Ang Lee, Che-Wi Chou, Chih-Shiuh Shieh, Mong-Fong Horng, Shu-Wei Guo*

**Session 5    Circuit and Embedded System Design for Computing and Signal Processing Technology**

**Date**            August 28, 2024 (Wednesday)

**Time**            15:15 – 17:00

**Room**           Miyazaki Kanko Hotel: 2F, East Wing (Room: HIMUKA)

- (1)    **Paper ID: ICGEC-2024-3**  
      **Handheld Pig-weight Estimation Using an RGB-D Sensor**  
      *Khin Dagon Win, Kikuhito Kawasue, Tadaaki Tokunaga, Yusuke Iki*
- (2)    **Paper ID: ICGEC-2024-5**  
      **Recognition of Viewer’s Gazing Interest with YOLOv7 and SVM Technologies for Smart Advertising Displays**  
      *Chun-Chung Cheng and Chih-Peng Fan*
- (3)    **Paper ID: ICGEC-2024-43**  
      **Facial Expression Recognition using Convolutional Neural Network with Residual Units and Attention Mechanism**  
      *Moe Moe Htay and Zin Mar Win*
- (4)    **Paper ID: ICGEC-2024-48**  
      **Mask Segmentation and Evaluation based on Mask Scoring R-CNN**  
      *Yu-Cheng Fan, Xiaomin Liu and Shen-Chin Chang*
- (5)    **Paper ID: ICGEC-2024-67**  
      **A Comparative Analysis of Convolutional Neural Networks (CNN) and Long Short-Term Memory (LSTM) Networks for Forecasting Stock Prices Over a One-Week Horizon at Yangon Stock Exchange**  
      *Kyaw Kyaw Khaing, Ah Nge Htwe and Andrew Lewis*
- (6)    **Paper ID: ICGEC-2024-70**  
      **From Vision to Vocabulary: A Multimodal Approach to Detect and Track Black Cattle Behaviors**  
      *Su Myat Noe, Thi Thi Zin , Pyke Tin and Ikuo Kobayashi*
- (7)    **Paper ID: ICGEC-2024-71**  
      **An Abnormal Behavior Recognition System for Bathrooms with Using Toilet Based on Thermal Image AI Edge Computing Technology**  
      *Wan-Jung Chang , Jia-Hong Liu, Yi-Jia Chen, and Liang-Bi Chen*



**Session 6**      **Advanced Meta-Heuristic Optimization Algorithms and Applications**

**Date**            August 28, 2024 (Wednesday)

**Time**            15:15 – 17:00

**Room**            Miyazaki Kanko Hotel: 2F, East Wing (Room: HATSUKARI)

- (1)    **Paper ID: ICGEC-2024-54**  
**Comprehensive Analysis to understand the potential of Embelin in Ulcerative Colitis: An Integrated approach of Weighted Gene Expression Analysis and Random Forest algorithm**  
*Prashanth S Javali and Kavitha Thirumurugan*
- (2)    **Paper ID: ICGEC-2024-55**  
**Computational Insights into WSSV Virulent Protein Interactions with Perfluorotributylamine from Halmonas salifodinae**  
*Vernita Priya and Sudhakaran Raja*
- (3)    **Paper ID: ICGEC-2024-80**  
**Emerging Horizons in Renal Cell Carcinoma Therapy: Impact of Cuproptosis-related miRNAs on RCC**  
*Subeka Abraham Gnanadass and Pragasam Viswanathan*
- (4)    **Paper ID: ICGEC-2024-81**  
**Transcriptome Analysis reveals key genes and Regulatory Networks in Early-onset Pre-eclampsia via integrated Bioinformatics Approach**  
*Tamil Barathi Palanisamy and Mohanapriya Arumugam*
- (5)    **Paper ID: ICGEC-2024-141**  
**A Graph Clustering Algorithm Based on Gravitational Vector**  
*Jitao Li, Yao Yao, Chugui Xu and Xue Tian*
- (6)    **Paper ID: ICGEC-2024-152**  
**Application of Willow Catkin Optimization Algorithm for Wireless Sensor Network**  
*Shu-Chuan Chu, Buyue Guo, Bing Sun, Hong-Mei Yang and Jeng-Shyang Pan*
- (7)    **Paper ID: ICGEC-2024-153**  
**A dimensional difference-based population size adjustment framework for Gannet optimization algorithm**  
*Jeng-Shyang Pan, Kunpeng Han, Shu-Chuan Chu, Zhi Li and Li Zhang*

**Session 7    Digital Transformation Technologies and Artificial Computing II**

**Date**            August 28, 2024 (Wednesday)

**Time**            15:15 – 17:00

**Room**           Miyazaki Kanko Hotel: 2F, East Wing (Room: ONIJI-A)

**(1)    Paper ID: ICGEC-2024-2**

**Molecular Phylogeny of Rhodotorula Yeasts Based on the Sequencing of 18S Ribosomal RNA Gene**

*Tungse W, Nuntapong N, Tantikitti C and Suanyuk N*

**(2)    Paper ID: ICGEC-2024-7**

**Low-Cost Indoor Smart-Aquaculture System for Endangered Species and Some Common Thai Freshwater Fish**

*Nopparat Tanmark, Nutt Nuntapong, Naraid Suanyuk, Akkarawit Issaro and Chutima Tantikitti*

**(3)    Paper ID: ICGEC-2024-51**

**Identification of Rumination Patterns in Cattle Through Optical Flow Analysis and Machine Learning Techniques**

*Taichi Ishikawa, Thi Thi Zin, Masaru Aikawa, Ikuo Kobayashi*

**(4)    Paper ID: ICGEC-2024-10**

**Molecular identification of Cordyceps javanica PSUC001 and its potential control strategy of the brown plant hopper Nilaparvata lugens (Stål) (Hemiptera: Delphacidae)**

*Peerasak Bunsap, Sinlapachai Senarat, Seree Niyomdech, Chaninun Pornsuriya and Narit Thaochan*

**(5)    Paper ID: ICGEC-2024-159**

**In Silico Assessment of 16S rRNA Primer Specificity for Targeted Bacterial Amplification: A Case Study with Vibrio parahaemolyticus**

*Kittichon U-taynapun, Nutsara Intharasuwan and Nion Chirapongsatonku*

**(6)    Paper ID: ICGEC-2024-84**

**Automatic Body Temperature Detection in Calves and Alarm System Using Thermographic Camera**

*Aung Si Thu Moe, Thi Thi Zin, Masaru Aikawa and Ikuo Kobayashi*

**(7)    Paper ID: ICGEC-2024-160**

**A Phylogenetic Update of Azospirillum Using Recent 16S rRNA Data**

*Nion Chirapongsatonkul, Wiriyaoporn Srisuksai, Butsarakorn Ratchapol, Agnesia Frisca Damayanti, and Kittichon U-taynapun*

<b>Session</b>	<b>Online Session</b>
<b>Date</b>	August 28, 2024 (Wednesday)
<b>Time</b>	13:00 – 15:00
<b>Room</b>	Miyazaki Kanko Hotel: 2F, East Wing (Room: ONIJI-A)

- (1) **Paper ID: ICGEC-2024-88**  
**Empowering Information Retrieval and Prediction of Socioeconomic Indicators through Knowledge-Driven Data Models**  
*Trinh-Dong Nguyen, Trong-The Nguyen, Thi-Kien Dao, Thanh-Trong Le, Quang-Ky Le*
- (2) **Paper ID: ICGEC-2024-142**  
**Dual-Population-Iterating and Preys-Gathering MPA for XGBoost optimization**  
*Jiacheng Li, Li Lv, Ping Kang, Xiumei Tian*
- (3) **Paper ID: ICGEC-2024-155**  
**Detection of Unknown Darknet Traffic with Random Forest**  
*Dong-Yu Lee, Thanh-Lam Nguyen, Chin-Shiuh Shieh, Mong-Fong Horng, Casper Tsai and Denis Miu*
- (4) **Paper ID: ICGEC-2024-156**  
**Multi-Class Attack Detection in IoT Using Dimensionality Reduction with Stacked Autoencoders and Classification with Long Short-Term Memory Networks**  
*Yu-Xian Lee, Chin-Shiuh Shieh, Mong-Fong Horng, Ying-Chieh Chao Prasun Chakrabarti*
- (5) **Paper ID: ICGEC-2024-157**  
**UAV image matching based on graph neural network**  
*Li Qiqi, Meng Lingyue, Liu Xiaomin, Zhao Huaqi and Liu Zhuo*
- (6) **Paper ID: ICGEC-2024-161**  
**General capability evaluation of autonomous navigation based on similarity calculation**  
*Hongtao Yin, Hao Zhang, Lixin Zhang*
- (7) **Paper ID: ICGEC-2024-164**  
**Analysis of Schema Formation in Genetic Algorithms: A Review**  
*Tiancong Zhang, Shaowei Weng, Shu-Chuan Chu, Thi-Kien Dao, Trong-The Nguyen*
- (8) **Paper ID: ICGEC-2024-165**  
**Evolving Effective Drug Therapies with Multi-Objective Genetic Algorithm**  
*Tiancong Zhang, Shaowei Weng, Shu-Chuan Chu, Trong-The Nguyen, Thi-Kien Dao*
- (9) **Paper ID: ICGEC-2024-143**  
**Feature Intracorrelation and Weighted Mahalanobis Distance for Fuzzy Support Vector Machine**  
*Lan Jiang, Li Lv, Siwei Peng, and Haihua Xie*

(10) **Paper ID: ICGEC-2024-151**

**Lightweight Remote Sensing Target Detection Algorithm based on Improved YOLOv5**

*Chaomin Wang, Fang Dong, Sheng Liang, Wanxin Yu, Kaixian Wu, Wang Wenfeng and Long Yu*

## Program Detail (Tentative) on August 29

**Session 8**    **Intersection of Medical Technology, AI, IOT, and Big Data Analysis I**

**Date**            August 29, 2024 (Thursday)

**Time**            08:45– 10:15

**Room**            Miyazaki Kanko Hotel: 2F, East Wing (Room: HIMUKA)

**(1) Paper ID: ICGEC-2024-1**

**Biomechanical Analysis of the Effect of Tibial Slope and Tibial Tunnel Angle on the Tibial Tunnel During Posterior Cruciate Ligament Reconstruction**

*Fan Yang, Takuji Yokoe, Koki Ouchi, Takuya Tajima, Etsuo Chosa*

**(2) Paper ID: ICGEC-2024-36**

**GIS-based Optimal Evacuation Path and Water Resources Finding for Fire Emergency Using Modified A\* Algorithm**

*Lei Lei Win and Nilar Thein*

**(3) Paper ID: ICGEC-2024-63**

**Evaluating Pipeline Architecture with Apache Kafka and Apache Flink: Data-Driven Architecture**

*Chan Min Kyaw and Nwe Nwe Myint Thein*

**(4) Paper ID: ICGEC-2024-78**

**An Attempt to Solve Fill in the Missing Letters CAPTCHA Using Generative AI**

*Hisaaki Yamaba, Shotaro Usuzaki, Kentaro Aburada, Masayuki Mukunoki, Mirang Park and Naonobu Okazaki*

**(5) Paper ID: ICGEC-2024-79**

**Effective Task Scheduling using Particle Swarm Optimization (PSO) with Various Offloading Strategies in Fog-Cloud Computing Environment**

*Zun Myat Myat Soe, Tin Zar Thaw and Yu Mon Zaw*

**(6) Paper ID: ICGEC-2024-82**

**Risk Management Model for Cloud-based Learning Platform in Academic Institution**

*Moe Moe San and Khin May Win*

**Session 9    Digital Transformation Technologies and Artificial Computing III**

**Date**            August 29, 2024 (Thursday)

**Time**            08:45– 10:15

**Room**           Miyazaki Kanko Hotel: 2F, East Wing (Room: HATSUKARI)

- (1)    **Paper ID: ICGEC-2024-20**  
      **A Technique based on Deep Learning for Classifying Rice Leaf Disease Using Pre-Trained Models**  
      *Lai Yee Win Lwin and Ah Nge Htwe*
- (2)    **Paper ID: ICGEC-2024-29**  
      **Dependency Parsing Using Recurrent Neural Network on Myanmar Language**  
      *Nwe Nwe Win and Win Pa Pa*
- (3)    **Paper ID: ICGEC-2024-31**  
      **Towards Infrastructure Automation using IaC in the era of GenAI**  
      *Han Min Myat, Myat Pwint Phyu and Aye Myat Myat Paing*
- (4)    **Paper ID: ICGEC-2024-34**  
      **Evacuation support system for tsunami disasters that considers shelter congestion**  
      *Hidetaka Nishi, Keita Nabeyama, Shotaro, Kentaro Aburada, Hisaaki Yamaba, Tetsuro Katayama, Naonobu Okazaki and Mirang Park*
- (5)    **Paper ID: ICGEC-2024-37**  
      **A Scalable Architecture for Improving Adaptive Bitrate Streaming Services**  
      *Taofik Lamsab and Pichaya Tandayya*
- (6)    **Paper ID: ICGEC-2024-69**  
      **Cattle Lameness Classification Using Cattle Back Depth Information**  
      *San Chain Tun, Pyke Tin, Masaru Aikawa, Ikuo Kobayashi, and Thi Thi Zin*

**Session 10 Intersection of Medical Technology, AI, IOT, and Big Data Analysis II**

**Date** August 29, 2024 (Thursday)

**Time** 10:30 – 12:00

**Room** Miyazaki Kanko Hotel: 2F, East Wing (Room: HIMUKA)

**(1) Paper ID: ICGEC-2024-13**

**A Secure IoT Network for Healthcare Systems Based on Quantum Key Distribution Protocol and AES Encryption**

*Myat Su Win and Khaing Khaing Wai*

**(2) Paper ID: ICGEC-2024-15**

**Detection of Malicious Activities in IoT Network based on Enhanced Dimensional Feature Reduction and BLSTM**

*Yee Mon Thant, Zin Thu Thu Myint, Chaw Su Htwe*

**(3) Paper ID: ICGEC-2024-24**

**Impact of Imbalanced Data on Apache Spark**

*Thet Hsu Aung and Aye Myat Myat Paing*

**(4) Paper ID: ICGEC-2024-72**

**Detection of Script Reading Face in Diet Deliberation Video**

*Tsuyoshi Yamaguchi, Takeshi Saitoh and Haibo Zhang*

**(5) Paper ID: ICGEC-2024-73**

**Adsorption Model Analysis on Semimetal Anions Using Cross-linking Chitosan Nanofiber Introduced Xylose**

*Kaoru Ohe, Miku Furukawa and Tatsuya Oshima*

**(6) Paper ID: ICGEC-2024-83**

**Individuality Prediction of Pain Facial Expressions Based on Permanent Wrinkles**

*Tsuyoshi Moriyama and Wang Xubo*

**Session 11 Digital Transformation Technologies and Artificial Computing IV**

**Date** August 29, 2024 (Thursday)

**Time** 10:30 – 12:00

**Room** Miyazaki Kanko Hotel: 2F, East Wing (Room: HATSUKARI)

**(1) Paper ID: ICGEC-2024-23**

**Land use land cover change analysis based on Deep Learning and SVM Classifier using Geospatial data (Case study Mandalay Township)**

*Aye Mya Thein and Ah Nge Htwe*

**(2) Paper ID: ICGEC-2024-42**

**Comparative Performance Analysis of Classification Methods for Educational Data, Rakhine State**

*Thaung Myint Tun and Zaw Tun*

**(3) Paper ID: ICGEC-2024-85**

**Cow's Back Surface Segmentation of Point-cloud Image using PointNet++ for Individual Identification**

*Pyae Phyo Kyaw, Pyke Tin, Masaru Aikawa, Ikuo Kobayashi, Thi Thi Zin*

**(4) Paper ID: ICGEC-2024-139**

**Applying Digital Restoration Techniques in Preservation of Ancient Murals using Diffusion-Based Inpainting**

*Khant Khant Win Tint, Mie Mie Tin (University of Technology, Thi Thi Zin and Pyke Tin*

**(5) Paper ID: ICGEC-2024-140**

**Next generation sequencing exome data analysis aids in the discovery of SNP and INDEL patterns in Parkinson's disease**

*Rajasree Odumpattaa and Mohanapriya Arumugama*

**(6) Paper ID: ICGEC-2024-170**

**A Mathematical Framework for Reinforcement Learning in Healthcare: Modeling and Analysis in Artificial Intelligence**

*Cho Nilar Phyo, Thi Thi Zin, Hiromitsu Hama and Pyke Tin*



**Session 12   Multimedia Data Processing III**

**Date**            August 29, 2024 (Thursday)

**Time**            13:00 – 14:45

**Room**            Miyazaki Kanko Hotel: 2F, East Wing (Room: HIMUKA)

- (1)    **Paper ID: ICGEC-2024-12**  
**Numerical Examination on Resonance Properties of Slot Ring Resonator with Throughput and Drop Ports for Biosensing**  
*Mitsuhiro Yokota and Yoshihiro Naka*
- (2)    **Paper ID: ICGEC-2024-33**  
**Performance Investigation of a New Chaotic Search Method for Vehicle Routing Problem with Drones**  
*Kazuma Nakajima, Takafumi Matsuura, and Takayuki Kimura*
- (3)    **Paper ID: ICGEC-2024-59**  
**Real-Time Video Denoising Acceleration Using Pixel Shuffle and FP16**  
*Riku Masuko, Yosuke Sugiura, and Tetsuya Shimamura*
- (4)    **Paper ID: ICGEC-2024-65**  
**Investigating Visual Illusions in Convolutional Neural Networks Using Spiral Illusion Images**  
*Kenji Aoki, Takuya Togo and Makoto Sakamoto*
- (5)    **Paper ID: ICGEC-2024-66**  
**Acoustic Feature Extraction Method for Piglet Call Detection**  
*Tenma Nakano, Yosuke Sugiura, Tetsuya Shimamura, Yoshiyuki Nakamura and Ayaka Miyazaki*
- (6)    **Paper ID: ICGEC-2024-75**  
**FxlogLMS+ : Modified FxlogLMS Algorithm for Active Impulsive Noise Control**  
*Aoi Haneda, Yosuke Sugiura and Tetsuya Shimamura*
- (7)    **Paper ID: ICGEC-2024-137**  
**Enhancing Wind Instrumentalists' Performance: Evaluating the MVP Support System with OpenPose Motion Capture**  
*Yasumasa Yamaguchi and Taku Kawada*

**Session 13      Digital Transformation Technologies and Artificial Computing V**

**Date**              August 29, 2024 (Thursday)

**Time**             13:00 – 14:45

**Room**            Miyazaki Kanko Hotel: 2F, East Wing (Room: HATSUKARI)

- (1)    **Paper ID: ICGEC-2024-35**  
      **Time-Driven Cost Estimation Learning Model**  
      *Theethawat Savastham and Nikom Suvonvorn*
- (2)    **Paper ID: ICGEC-2024-53**  
      **A Study on Health Management by Behavior Analysis of Calve**  
      *Taketo Nishiyama, Shiiya Kazuhisa, Masaru Aikawa, Ikuo Kobayashi, Thi Thi Zin*
- (3)    **Paper ID: ICGEC-2024-60**  
      **Research on Individual Identification of Walking Cows using a 3D Camera**  
      *Yo Shiihara, Thi Thi Zin, Masaru Aikawa and Ikuo Kobayashi*
- (4)    **Paper ID: ICGEC-2024-74**  
      **A Study on the Comparison of various Preprocessing Methods for Bengali Character Recognition using Convolutional Neural Network**  
      *Md Shafayet Jamil and Hiroki Tamura*
- (5)    **Paper ID: ICGEC-2024-167**  
      **Vision Enhancement System with AR Wearable Aid for Low-Vision People**  
      *Jing-Hong Chen and Chien-Chou Lin*
- (6)    **Paper ID: ICGEC-2024-158**  
      **The correlation between fractal dimension and subjective assessment of scene landscape in game Ghost of Tsushima – from multi-ethnic analysis to single-ethnic analysis**  
      *Xiaohan Mei and Yoichi Kunii*