



ISIITA 2024

HYBRID MODE (Virtual & Physical)

International Symposium on Innovation in Information Technology and Application

PROGRAM

University of the Philippines Cebu, Philippines

January 15-18, 2024



Organized by

International Society for Information Technology and Application (ISITA)
University of the Philippines Cebu
DU The Research Institute for Special Education & Rehabilitation Science
(NRF-2022S1A5C2A07091326)

WELCOME ADDRESS

Welcome to 2024 International Symposium on Innovation in Information Technology and Application

A sincere welcome awaits all visitors.

As we entered the 21st century, the rapid growth of information technology has changed our lives more conveniently than we have ever speculated.

Recently in all fields of the industry, heterogeneous technologies have converged with information technology resulting in a new paradigm, IT convergence, and people have been breaking the limit and finding other possibilities of IT research and development through converging with various industries and technologies.

The goal of this conference is to discover a new progressive technology by upgrading the previous technologies and to solve the technical problems that may have occurred in the process of converging technology in various fields of industry.

The International Symposium Innovation in Information Technology Application (ISIITA) 2024, the world's premier networking forum of leading researchers in the highly active fields of information technology application, will be held in Cebu island, Philippines. The ISIITA 2024 will include oral and poster sessions as well as tutorials given by experts in state-of-the-art topics.

IT experts, researchers, and practitioners from each field are invited to share ideas and research technologies; moreover, encouraged to cooperate with each other to overcome the confronted technical problems. As a result, this conference will become a place of knowledge where a variety of effects can be created.

We are proud to invite you to Cebu island, Philippines, which is a perfect setting for the Joint Conference. We truly hope that you will have a technically rewarding experience as well as some memorable experiences in Cebu island, Philippines.

It is our hope that you're participating in ISIITA 2024 will be a rewarding experience and that you will get a chance to meet other colleagues working in the exciting area of industrial information systems. We are all looking forward to seeing you in Cebu island, Philippines.

A sincere welcome awaits all visitors at the joint conference.

Sang Hyuk LEE
General Chairs
New Uzbekistan University,
Uzbekistan

Robert R. Roxas
General Chairs
University of the Philippines Cebu,
Philippines

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Conference Secretary	<p>Hyung Gyu Lee (Duksung Women's University, Korea)</p>

PROGRAM AT A GLANCE

Time	Event
Jan 15 2024	
13:30~15:15	SIG Meeting I
15:15~15:35	Coffee Break
15:35~16:35	SIG Meeting II
Jan 16 2024	
08:30~09:00	Registration
09:00~09:20	Opening Ceremony (Room: PAH)
09:20~10:20	Keynote I (Room: PAH)
10:20~10:30	Coffee Break
10:30~12:00	Session 1 (Room: PAH)
12:00~13:00	Lunch
13:00~14:30	Session 2 (Room: PAH)
14:30~14:40	Coffee Break
14:40~15:50	(Room: AVR-1) Special Session 3 Session 4 (Posters & Capstone) (Room: PAH)
15:50~16:00	Coffee Break
16:00~17:10	(Room: PAH) Session 5 Session 6 (Room: AVR-1)
17:10~18:30	Move to Crimson Resort: Bus service
18:30	Banquet (Coral 1 & 2 in Crimson Resort)

※Times are expressed in Cebu, Philippines.

※The schedule is subject to change due to various circumstances without notice.

Jan 17 2024	
09:00~10:30	Session 7 (Room: PAH)
10:30~10:50	Coffee Break
10:50~12:20	Session 8 (Room: PAH)
12:20~13:30	Lunch
13:30~14:40	Session 9
14:40~14:50	Break
14:50~15:50	Session 10
15:50~17:00	Session 11 Special Session 12
Jan 18 2024	
09:00~11:30	Interactive Networking
11:30~11:40	Committee Meeting
11:30	Closing Ceremony

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※The schedule is subject to change due to various circumstances without notice.

SCIENTIFIC PROGRAM

January 15 2024	
Time	Content
13:30 ~	SIG Meeting I
15:15 ~	Coffee Break
15:35 ~	SIG Meeting II
16:35 ~	

January 16 2024	
Time	Content
08:30 ~	Registration
09:00 ~	Opening Ceremony (General Chair, Vice Chancellor of Academic Affairs UP Cebu)
09:20 ~	Keynote I (Dr. Charibeth Cheng)
10:10 ~	Coffee Break
10:30 ~	Session 1: Analyzing and Optimizing for Deep Learning Chair: Yoosoo Oh (Daegu Univ.)
	1S-1 A Study on Performance Analysis of RNN Architecture Using Unbalanced Network Dataset Donghwoon Kwon ¹⁾ , Asser Nasser Moustafa ¹⁾ , and Jeong-Tak Ryu ²⁾ ¹⁾ Dept. of Computer Science and Engineering, North Central College, Naperville, IL 60540, USA ²⁾ School of Electronic and Communication Engineering, Daegu University, Gyeongsan-si, South Korea
	1S-2 A Study on Prediction of Closing Stock Prices Using a Convolutional Neural Network Model Even Nybo ¹⁾ , Joshua Buhr ¹⁾ , Nicklaus Campanella ¹⁾ , and Donghwoon Kwon ^{1)*} ¹⁾ Dept. of Computer Science and Engineering, North Central College, Naperville, IL 60540, USA
	1S-3 Feasibility of Transfer Learning for Network Anomaly Detection Donghwoon Kwon ^{1*)} , Naveen Chennaipalem ²⁾ , Junekyoung Lee ³⁾ , and Jinoh Kim ¹⁾ ¹⁾ Dept. of Computer Science and Engineering, North Central College, Naperville, IL 60540, USA ²⁾ Computer Science Department, Texas A&M University, Commerce, TX 75429

	<p>³⁾NaonWorks Inc., 7F (Byeoksan Digital Valley 3), 271, Digital-ro, Guro-gu, Seoul, Korea</p>
1S-4	<p>Active and Passive Learning Approaches in Computer-mediated Platform do not significantly differ in e-Learning Gains</p> <p>Ethan Chav Isaac P. Sumalinog¹⁾ and Demelo M. Lao^{1*)} ¹⁾Department of Computer Science, College of Science, University of the Philippines Cebu, Lahug, Cebu City 6000, Cebu, Philippines.</p>
1S-5	<p>A Deep Learning Framework for Protecting Personal Computers from Unauthorized Mobile Screen Recordings</p> <p>Ihsan Ullah¹⁾, Rock Hyun Choi¹⁾ and Hyunki Lee^{1*)} ¹⁾Division of Intelligent Robotics, DGIST, Daegu, 42988, South Korea</p>
1S-6	<p>Automatic Data Transformation System for Regressor and Classifier</p> <p>Sehyun Myeong¹⁾, Yoosoo Oh^{2,*)} ¹⁾School of AI, Daegu University, Gyeongsan-si, Republic of Korea ²⁾School of AI, Daegu University, Gyeongsan-si, Republic of Korea</p>

12:00 ~	Lunch
13:00 ~	<p>Session 2: Machine Learning and Applications Chair: Hyungki Lee (DGIST)</p>
	<p>2S-1 Securing Truth: Integrated Deep fake Detection with Advanced Fusion Techniques</p> <p>Javokhir Jumaboev¹⁾, Mohamed Uvaze Ahamed Ayoobkhan^{1*)} ¹⁾Department of Computer Science, New Uzbekistan University, Tashkent, Uzbekistan.</p>
	<p>2S-2 Hesitation Analysis and Score Function Design on Intuitionistic Fuzzy Set Data</p> <p>Sanghyuk Lee^{1*)}, Yuliya Durova¹⁾ ¹⁾Department of Computer Science, New Uzbekistan University, Tashkent, Uzbekistan</p>
	<p>2S-3 Online Machine Learning: Adapting to Dynamic Data Streams in Real Time</p> <p>Diyorbek Usmanov¹⁾ ¹⁾Department of Computer Science, New Uzbekistan University, Tashkent, Uzbekistan.</p>
	<p>2S-4 Method to reduce false-positive errors using discretization and short-term filter for mobile device detection</p> <p>Rock Hyun Choi¹⁾ and Hyunki Lee^{1*)} ¹⁾Division of Intelligent Robotics, DGIST, Daegu, 42988, South Korea</p>
	<p>2S-5 Analysis of The Number of Views According to The YouTube Title using a Regression Algorithm</p> <p>Hyeonji Kim¹⁾ and Yoosoo Oh^{2,*)} ¹⁾Dept. of Information and Communication Engineering, Daegu University, Gyeongsan-si, Korea ²⁾School of AI, Daegu University, Gyeongsan-si, Republic of Korea</p>
	<p>2S-6 Music Genre Classification of Philippine Music</p> <p>Alden Robell M. de Loyola^{1*)} and Robert R. Roxas¹⁾ ¹⁾Dept. of Computer Science, University of the Philippines Cebu, Cebu, Philippines</p>
14:30 ~	Coffee Break
14:40 ~	<p>Session 3: Inclusive Education and Assistive Technology Chair: Kyeong Ock Park (Daegu Univ.)</p>
	<p>3S-1 A National Snapshot of Assistive Technology for Students with Special Needs in South Korea</p> <p>Jiyeon Kim¹⁾ ¹⁾Dept. of Adapted Physical Education, Korea National Sport University, Seoul 05541, Korea</p>

	<p>3S-2 The Usefulness of Korean Painting in Art Therapy : Focusing on the Therapeutic Factors Byeongmun Son¹⁾, Eunyeong Choi^{2*)}, and Enok Bae¹⁾ ¹⁾The Research Institute for Special Education & Rehabilitation Science, Daegu University, Korea ²⁾Dept. of Rehabilitation Psychology, Daegu University, Republic of Korea</p>
	<p>3S-3 Special Education Teachers' Experiences and Perceptions Regarding the Use of Artificial Intelligence for Teaching Students with Disabilities Min Wook, Ok¹⁾, Kyoung Ock, Park²⁾ and Jiyeon, Kim^{3*)} ¹⁾Dept. of Special Education, Daegu University, Gyeongsan, 38453, Republic of Korea ²⁾Dept. of Elementary Special Education, Daegu University, Gyeongsan, 38453, Republic of Korea ³⁾Dept. of Adapted Physical Education, Korea National Sport University, Seoul, 05541, Republic of Korea</p>
	<p>3S-4 The Development of Metaverse-based Educational Content for Improving Social Skills of Students with Developmental Disabilities Kyungin Han¹⁾, Daesong Lee^{2*)}, Seohyeon Noh³⁾, Yunhee Shin⁴⁾ and Kyuman Jeong⁵⁾ ¹⁾Institute of Special Education & Rehabilitation Science, Daegu University, Republic of Korea ²⁾Gyeongsangnamdo Hamyang office of Education, Hamyang-Gun, Republic of Korea ³⁾Bansong Elementary School, Changwon-si, Republic of Korea ⁴⁾Behavior Therapy, Daegu Cyber University, Gyeongsan-si, Republic of Korea ⁵⁾School of AI, Daegu University, Gyeongsan-si, Republic of Korea</p>
	<p>3S-5 The Effect of Positive Behavior Support Through Non-face-to-face Coaching on Self-harming Behavior and Classroom Participation Behavior in High School Students with Developmental Disabilities Juyeonr Yun¹⁾, Kyoungock Park²⁾ and Pureum Ji, Gyouhee Kim¹⁾ ¹⁾The Research Institute for Special Education & Rehabilitation Science, Daegu University, Korea ²⁾Dept. of Elementary Special Education, Daegu University, Republic of Korea</p>
	<p>Session 4A: Interactive Posters Chair: Jeong Tak Ryu (Daegu Univ.)</p>
14:40 ~	<p>4S-1 Radar Signal Processing Scheme for Human Identification YoungSeok Jin¹⁾, Ji-Eun Bae¹⁾, Inoh Choi¹⁾, and Eugin Hyun^{1*)} ¹⁾Division of Automotive Technology, DGIST, Daegu, Republic of Korea</p>
	<p>4S-2 Mastectomy skin flap stability prediction using indocyanine green angiography : A randomized prospective trial Min Ji Kim¹⁾, Hyoseob Lim¹⁾, and Il Jae Lee¹⁾ ¹⁾Department of Plastic and Reconstructive Surgery, Ajou University School of Medicine, Suwon, Korea.</p>
	<p>4S-3 A method for improving latency between devices equipped with speakers Cheoljae Kim ¹⁾, Seokwon Hong ²⁾, Hyeol Yang ³⁾, and Kyuman Jeong ^{3*)} ¹⁾Dept. of Information and Communication Engineering, Daegu University, Daegu, Korea ²⁾An Industry-Academic Cooperation Group, Daegu University, Daegu, Korea. ³⁾School of AI, Daegu University, Daegu, Korea</p>
	<p>4S-4 Learning deep models for face anti-spoofing by pixel-wise supervision with depth labels Myoung-Kyu Sohn¹⁾, Sang-Heon Lee¹⁾, Hyunduk Kim¹⁾, and Junkwang Kim¹⁾ ¹⁾Division of Automotive Technology, DGIST, Daegu, Republic of Korea</p>
	<p>4S-5 Selective Alignment of DNA Molecules using Local Surface Charges controlled by Plasma Ashing Method Hyung Jin Kim^{1*)} and Doyoung Kim¹⁾ ¹⁾Dept. of Electrical & Electronic Engineering, Ulsan College, Ulsan 44610, Korea</p>
	<p>4S-6 The effects of various core exercise on biomechanical properties of lower limb muscles in healthy young individuals during 12-weeks Hyuk-Jae Choi^{1*)}, Won-Young Lee^{2*)}, InHo Hwang¹⁾, Chang-Yong Ko^{3*)} and Sung-Phil Heo^{4*)} ¹⁾Dept. of Research & Development, Rehabilitation Engineering Research Institute, Korea Workers' Compensation & Welfare Service, Incheon 21417, Korea ²⁾Dept. of Institute of Sports Medicine, Hannam University, Daejeon 34430, Korea ³⁾Dept. of Research & Development, Refind Inc., Wonju 26354, Korea ⁴⁾Gangneung-Wonju National University, Wonji-si, 26403, Korea</p>

4S-7	ANN-based Pet Activity Recognition with Wearable Sensors <i>Heerae Lee¹⁾, Seongyeong Kim¹⁾, and Hyung Gyu Lee^{1,*)}</i> ¹⁾ Dept. of Software, Duksung Women's University, Seoul 01369, Korea
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16:00 ~	<p>Session 5: Innovative Solutions in Mobile Systems and Security Chair: Hyung Gyu Lee (Duksung Women's Univ.)</p>
	5S-1 Collaboration-focused Network Design for Return & Collection in a Delivery Services <i>Muzaffar Makhmudov¹⁾ and Chang Seong Ko^{2*)}</i> ¹⁾ Department of Industrial Management, New Uzbekistan University, Uzbekistan ^{2*)} Department of Industrial and Management Engineering, Kyungsung University, Korea
	5S-2 Operating System Security Vulnerabilities in Autonomous Vehicles <i>Clint Scholtisek¹⁾, Connor Kreis²⁾, Kamran Siddique^{3*)}, Mengwen Wang⁴⁾, Yuechun Wang⁵⁾, and Ka Lok Man⁶⁾</i> ¹⁾²⁾³⁾ University of Alaska Anchorage ⁴⁾⁵⁾ Sanda University, Shanghai, China. ⁶⁾ Xi'an Jiaotong-Liverpool University, Suzhou, China.
	5S-3 An Exploratory Case Study of TempleOS: An Open-Source Lightweight Operating System <i>Tremayne Booker¹⁾, Mary Kollander²⁾, Puah Jia Hong³⁾, Kamran Siddique^{4*)}, Xieyang Zhou⁵⁾, Yuechun Wang⁶⁾, and Ka Lok Man⁷⁾</i> ¹⁾²⁾³⁾⁴⁾ School of Computer Science and Computer Engineering, University of Alaska Anchorage Anchorage Alaska, United States ⁵⁾⁶⁾ Dept. of Information Science and Technology, Sanda University, Shanghai, China. ⁷⁾ School of Advanced Technology, Xi'an Jiaotong-Liverpool University, Suzhou, China.
	5S-4 Design of Blockchain-based Network System for Multi-domain V2G Environments <i>DeokKyu Kwon¹⁾, Seunghwan Son¹⁾ and Youngho Park^{1*)}</i> ¹⁾ School of Electronic and Electrical Engineering, Kyungpook National University, Daegu 41566, Korea
	5S-5 Estimating Software Project Performance Using Factor Analysis and Sequential Equation Modeling <i>Khumoyun Aminaddinov Ravshanovich¹⁾, Lionel Randall Kharkrang²⁾</i> ¹⁾ Dept. of Computer Science, New Uzbekistan University, Tashkent 10000, Uzbekistan ²⁾ Dept. of Physics, National Institute for Astrophysics, University of Trieste, Italy
	5S-6 Novel RectER Circuit For Energy Harvesting For High Output Voltage <i>Wend Yam Ella Flore NIADA¹⁾, You Chung CHUNG²⁾</i> ¹⁾ Dept. of Electronic Engineering, Daegu University, Gyeongsan, Korea ²⁾ Dept. of Information and Communication Engineering, Daegu University, Gyeongsan, Korea

16:00 ~	<p>Session 6: Automated Service Impact Analysis Chair: Min Ho Ryu (Dong-A Univ.)</p>
	6S-1 A Study on the Effect of the Bank's Automatic Call Service <i>Sohui Kim¹⁾ and Min Ho Ry^{1*)}</i> ¹⁾ Dept. of Management Information System, Dong-A Univ., Busan 49236, Korea=
	6S-2 Beacon -Voice Assistant for Impaired People on Windows PC <i>Truong Quoc Thang^{1*)}, Pham Quoc Bao, Nguyen Van Vi¹⁾, Than Thi Thao¹⁾, Nguyen Trieu Tien¹⁾, Tran Kim Sanh¹⁾</i> ¹⁾ International School, Duy Tan University, DaNang City, 550000, Vietnam
	6S-3 Online Learning Platform with a Content Summarization Tool <i>Dang Nhat Minh^{1*)}, Do Minh Nhat, Phan Nhat Tuan¹⁾, Pham Anh Quyet¹⁾, Tran Minh Tu, Huynh Ba Dieu¹⁾</i> ¹⁾ International School, Duy Tan University, DaNang City, 550000, Vietnam

	<p>6S-4 Apply Decision Trees Algorithm To Build The Wellness Navigator Management System <i>Nguyen Huu Vien¹⁾, Tran Duy Tung¹⁾, Do Tien Thanh¹⁾, Vo Van Hao¹⁾, Tran Thi Thuy Trinh¹⁾</i> ¹⁾Internation School, Duy Tan university, Da Nang city, 55000</p>
	<p>6S-5 Identifying and Extracting Sentiment Words Using Reason-Sentiment Pattern <i>Woo Hyun Kim¹⁾ and Heejung Lee^{2*)}</i> ¹⁾Dept. of Industrial Data Engineering, Hanyang University, Seoul 04763, Korea ²⁾School of Interdisciplinary Industrial Studies, Hanyang University, Seoul 04763, Korea</p>
17:10 ~	Move to Crimson Resort: Bus service
18:30 ~	Banquet

January 17 2024	
Time	Content
09:00~	<p>Session 7: Cutting-edge Medical AI Innovations Chair: Hyunduk Kim (DGIST)</p>
	<p>7S-1 SS-GAN-ViT: Advancing Multi-label Chest Image Annotation Through Self-Supervised Learning, Adversarial Networks, and Vision Transformers <i>Sang Suh¹⁾, Sobha Rani Ponduru¹⁾, Nikitha Tammareddy¹⁾, and Bhavana Makkena¹⁾</i> ¹⁾Department of Computer Science, Texas A&M University-Commerce, Commerce, TX, U.S.A.</p>
	<p>7S-2 Medichat – A Medical Chatbot with Multilingual Support <i>Sang Suh¹⁾ and Rama Krishna Kamma¹⁾</i> ¹⁾Department of Computer Science. Texas A&M University - Commerce, Commerce, TX, U.S.A.</p>
	<p>7S-3 Visualization Tool: Exploring COVID-19 Data <i>Donghyun Jeon^{1*)}, Jong Kwan Lee¹⁾, Prabal Dhaubhadel¹⁾, and Aaron Kuhlman¹⁾</i> ¹⁾Dept. of Computer Science, Bowling Green State University, Bowling Green, Ohio 43403, U.S.A.</p>
	<p>7S-4 Research on human 2D edge sample point to 3D mesh coordinate conversion <i>Junkwang Kim¹⁾, Myoung-Kyu Sohn¹⁾, Sang-Heon Lee¹⁾, and Hyunduk Kim¹⁾</i> ¹⁾Division of Automotive Technology, DGIST, Daegu, Republic of Korea</p>
	<p>7S-5 Remote Heart Rate Estimation using Swin Transformer V2 and Wrapping Temporal Shift Modules <i>Hyunduk Kim¹⁾, Sang-Heon Lee¹⁾, Myoung-Kyu Sohn¹⁾, and Junkwang Kim¹⁾</i> ¹⁾Division of Automotive Technology, DGIST, Daegu, Republic of Korea</p>
	<p>7S-6 Using Deep Learning to Determine Time and Geographic Trends of Sentiments Towards Covid-19 Vaccine <i>Alex A. Diola^{1*)} and Robert R. Roxas²⁾</i> ^{1, 2)}Dept. of Computer Science, University of the Philippines Cebu, Cebu, Philippines</p>
10:30~	Coffee Break

10:50 ~	<p>Session 8: AI for Medical Analysis Chair: T. Velmurugan (Dwaraka Doss Goverdhan Doss Vaishnav College)</p>
	<p>8S-1 Classification of Tuberculosis in Chest X-rays using SMOTE-enhanced Neural Networks (SMONN) <i>SriPradha.G¹⁾, J.Vanathi²⁾ and T.Velmurugan^{3*)}</i> ^{1,2)}Guru Nanak College(Autonomous), Velachery, Chennai-600042 ³⁾PG and Computer Science D. G. Vaishnav College, University of Madras, Chennai-600106</p>

	8S-2	Making use of Image Processing along with Machine Learning techniques, examination of leaf composition, and disease detection <i>M.Robinson Joel¹⁾, T.D.Jeba Freeda²⁾, and Prince Immanuel J³⁾</i> ^{1,3)} Department of Information Technology Kings Engineering College, Chennai, India. ²⁾ Department of Computer Science, Noorul Islam College of arts and Science, Kumaracoil
	8S-3	Performance Analysis of k-Means and Fuzzy C-Means (FCM) Clustering Algorithms for Diabetic Dataset <i>K. Emayavaramban¹⁾ and T. Velmurugan²⁾</i> ¹⁾ Loganatha Narayanaswamy Arts College (Autonomous), ponneri, India. ²⁾ PG and Research Department of Computer Science, D.G. Vaishnav College, Chennai
	8S-4	A Study on Disease Detection Methods in Sugarcane Plants Using Conventional Neural Network in Deep learning <i>T. Angamuthu¹⁾ and A.S. Arunachalam¹⁾</i> ¹⁾ Vels Institute of Science, Technology and Advanced Studies, Pallavaram, Chennai, Tamil Nadu 600117, India
	8S-5	Integrated BERT and Rule-based Framework for Comprehensive Medical Sentiment Analysis in Twitter Discourse <i>P.C.Sridevi¹⁾ and T.Velmurugan¹⁾</i> ¹⁾ PG and Research Department of Computer Science, D.G. Vaishnav College, India
	8S-6	GPT Empowered: Decoding Public Sentiment Trends on Twitter based COVID-19 Vaccination <i>P.C.Sridevi¹⁾, T.Velmurugan¹⁾, and K. Jayabharathi¹⁾</i> ¹⁾ PG and Research Department of Computer Science, D.G. Vaishnav College, India
12:20 ~	Lunch	
13:30 ~	Session 9: Machine Learning for Security and Text analysis Chair: Rock Hyun Choi (DGIST)	
	9S-1	Enhancing Hill Cipher Security through Machine-Learned Key Generation <i>Mu. Tirumalai¹⁾ and S. Poornavel²⁾</i> ¹⁾ PG & Research Department of Mathematics, 1Pachaiappa's College, Chennai ²⁾ Department of Mathematics, SIMATS School of Engineering, 2Saveetha Institute of Medical and Technical Sciences, Chennai, India.
	9S-2	Cracking the code of Fake News: From PolitiFact Extraction to Machine Learning Mastery <i>Dr. M. P. Sukassini¹⁾ and Dr. R. Anandhi¹⁾</i> ¹⁾ PG and Research Department of Computer Science, D.G. Vaishnav College, India
	9S-3	Impact of AI Driven Conversational Chatbot: Current Advancements and Leading Innovations in Education System <i>G. Kanimozhi¹⁾, K. Bhuvaneswari²⁾, and T. Velmurugan³⁾</i> ¹⁾ Assistant Professor, Dept. of Information Technology, Guru Nanak College, Chennai ²⁾ Assistant Professor, Dept. of Computer Science, Guru Nanak College, Chennai. ³⁾ Associate Professor, PG and Research Dept. of MCA, D.G. Vaishnav College, Chennai.
	9S-4	Text based Emotion Analysis in Social Media Data using Machine Learning techniques <i>B.Jayapradha¹⁾ and T.Velmurugan¹⁾</i> ¹⁾ PG and Research Department of Computer Science, D.G. Vaishnav College, India
	9S-5	Enhancing Sentiment Analysis in Electronic Product Reviews Using Machine Learning Algorithms <i>M. Archana¹⁾, T.Velmurugan¹⁾, and U.Latha¹⁾</i> ¹⁾ PG and Research Department of Computer Science, D.G. Vaishnav College, India
	9S-6	Ecotoxicological Impact Assessment on Donaxincarnatus: An In-depth Exploration of Heavy Metal Bioaccumulation Effects <i>S.Eswari¹⁾, R.Parthiban¹⁾, and P.C.Sathyanarayanan¹⁾</i> ¹⁾ pachaiyappa's college, Chennai. India

14:40 ~	Break
14:50 ~	<p>Session 10: Advanced Monitoring and Analysis Techniques for Power and communication system Chair: Eugen Hyun (DGIST)</p>
	<p>10S-1 Comparative Analysis of Fault Detection Algorithms for MVDC Distribution Systems Nam-Gi Park¹⁾, Jae-In Lee²⁾, Minh-Chau Dinh²⁾, Seok-Ju Lee²⁾, and Minwon Park^{1*)} ¹⁾Dept. of Electrical Engineering, Changwon National University, Changwon, Republic of Korea ²⁾Institute of Mechatronics, Changwon National University, Changwon, Republic of Korea</p>
	<p>10S-2 Design of a RUL Prediction Algorithm for a 2 MW class Wind Turbine Blade and Tower Thi-Tinh Le¹⁾, Minh-Chau Dinh²⁾, Changhyun Kim²⁾, Seok-Ju Lee²⁾, and Minwon Park^{1*)} ¹⁾Dept. of Electrical Engineering, Changwon National University, Changwon, Republic of Korea ²⁾Institute of Mechatronics, Changwon National University, Changwon, Republic of Korea</p>
	<p>10S-3 Analysis of Antenna Characteristics Depending on Angle Between Flat Radar Cover and Radar Antenna Junho Yeo^{1*)}, Jeong Tak Ryu²⁾, Seungeon Song³⁾, and Jonghun Lee³⁾ ¹⁾School of Artificial Intelligence, Daegu University, Gyeongsan, Korea ²⁾Department of Electronics Engineering, Daegu university, Gyeongsan, Korea ³⁾Division of Automotive Technology, Research Institute, DGIST, Dalseong-gun, Daegu, Korea</p>
	<p>10S-4 VIRTULIVING: YOUR DREAM RESIDENCE IN VR Suryawanshi Ansh¹⁾, Vathore Dhamdeep¹⁾, Choudhary Prabha¹⁾, C.Kalpna¹⁾, and Swati Pillai¹⁾ ¹⁾ Department of Science(Information Technology), SST College of Arts and Commerce .Ulhasnagar . Maharastra. India</p>
	<p>10S-5 SMARTLEARN TIMES: API-POWERED EDUCATION HEADLINES APP ¹⁾Chaudhari Mayur¹⁾, Jangale Kuna¹⁾, C.Kalpna¹⁾, Khushbu Purswani¹⁾, and J.C.Purswani¹⁾ ¹⁾ Department of Science(Information Technology), SST College of Arts and Commerce .Ulhasnagar . Maharastr, India</p>
15:50 ~ 17:00	<p>Session 11: Advanced Applications of Machine Learning and Numerical Methods Chair: Junho Yeo (Daegu Univ.)</p>
	<p>11S-1 Design of an Object Detection Model for an Automatic Ship Unloader System Chi-Hieu Ngo¹⁾, Chang-hyun Kim²⁾, Minh-Chau Dinh²⁾, Seok-Ju Lee²⁾ and Minwon Park^{1*)} ¹⁾Dept. of Electric Engineering, Changwon National University, Changwon, Republic of Korea ²⁾Institute of Mechatronics, Changwon National University, Changwon, Republic of Korea</p>
	<p>11S-2 Data Augmentation for Finger Gesture Recognition using Label Spreading Method Woosoon Jung¹⁾, Jeong Tak Ryu²⁾, Kyuman Jeong³⁾, and Yoosoo Oh^{4*)} ¹⁾The Research Institute for Special Education & Rehabilitation Science, Daegu University, Gyeongsan-si, 38453, Korea ²⁾Dept. of Electronic and Electrical Engineering, Daegu University, Gyeongsan-si, 38453, Korea ^{3, 4)}School of AI, Daegu University, Daegu University, Gyeongsan-si, 38453, Korea</p>
	<p>11S-3 Numerically solving various partial differential equations on non-flat surfaces Yongho Choi¹⁾ ¹⁾Dept. of Computer & Information Engineering, Daegu University, Gyeongsan-si, Republic of Korea</p>
	<p>11S-4 Smart Timer Application Development using Flutter Sung-Hyeon Jin¹⁾, Kyung-Ae Cha^{2*)}, Jeong-Tak Ryu³⁾ and Kyoung-Ock Park⁴⁾ ^{1) 2)} Dept. of Artificial Intelligence, Daegu University, Gyeongsan-si, Korea ³⁾Dept. of Electric Engineering, Daegu University, Gyeongsan-si, Korea ⁴⁾Dept. of Elementary Special Education, Daegu University, Gyeongsan-si, Korea</p>
	<p>11S-5 Experimental Performance Analysis of 24 GHz RADAR with Different Radome Materials and Configurations Junho Yeo^{1*)}, Jonghwan Lee²⁾, and Jeong Tak Ryu²⁾ ¹⁾ School of Artificial Intelligence, Daegu University, Gyeongsan, Korea</p>

	²⁾ Department of Electronics Engineering, Daegu university, Gyeongsan, Korea
15:50 ~ 17:00	Session 12: Intelligent Semiconductor Chair: Kyung Ki Kim (Daegu Univ.)
	12S-1 LightDet: Lightweight Detector for Small Objects Akshay Kumar Sharma ¹⁾ and Kyung Ki Kim ^{2*)} ¹⁾ Dept. of Electronic Engineering, Daegu University, Gyeongsan, 38453, Korea
	12S-2 Nonlinear Analysis of Neuronal Activity with Two Firing Patterns Yoko Uwate ¹⁾ and Yoshifumi Nishio ¹⁾ ¹⁾ Dept. of Electrical and Electronics Engineering, Tokushima University, 2-1 Minami Josanjima Tokushima, 770-8506, JAPAN
	12S-3 An SRAM-Based Transpose Compute-In-Memory Macro Utilizing Programmable Single-Slope SAR ADC Xin Zhang ¹⁾ , Youngjun Jo ¹⁾ , and Tony Tae-Hyoung Kim ¹⁾ ¹⁾ School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore
	12S-4 A hybrid WPT System for Achieving CC/CV Switching Jianxin Yan ¹⁾ , Wenqi Zhu ¹⁾ , Yinchun Xie ¹⁾ , and Hiroo Sekiya ¹⁾ ¹⁾ Graduate School of Information Science, Chiba University, Chiba, Japan
	12S-5 The Problem of Signal Extraction Based on Sweep Sine for EIS System and Its Solution En-Chi Yang ¹⁾ and Shin-Chi Lai ^{2*)} ¹⁾ Dept. of Electronic Engineering, National Yunlin University of Science and Technology, Taiwan. ²⁾ Dept. of Automation Engineering, National Formosa University, Yunlin, Taiwan.
January 18 2024	
Time	Content
09:00 ~	Interactive Network
11:00 ~	Committee Meeting
11:30 ~	Closing Ceremony

VENUE

Main venue for conference program

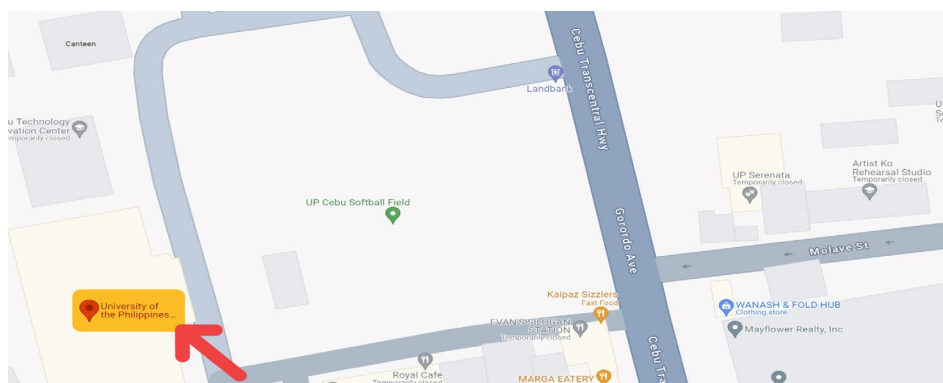
UNIVERSITY OF THE PHILIPPINES CEBU (<https://upcebu.edu.ph>), Performing Arts Hall



Address: Performing Arts Hall, Gorordo Ave, Lahug, Cebu City 6000 CEBU Philippines
Bus Schedule between UP Cebu and Crimson Resort

Time	Pick up	Drop-off
7:30AM Jan. 16, 2024	Crimson Resort & SPA	Univ. of the Philippines Cebu
5:20PM Jan. 16, 2024	Univ. of the Philippines Cebu	Crimson Resort & SPA
20:30PM Jan. 16, 2024	Crimson Resort & SPA	Univ. of the Philippines Cebu
7:50AM Jan. 17, 2024	Crimson Resort & SPA	Univ. of the Philippines Cebu
13:00PM Jan. 17, 2024	Univ. of the Philippines Cebu	Crimson Resort & SPA

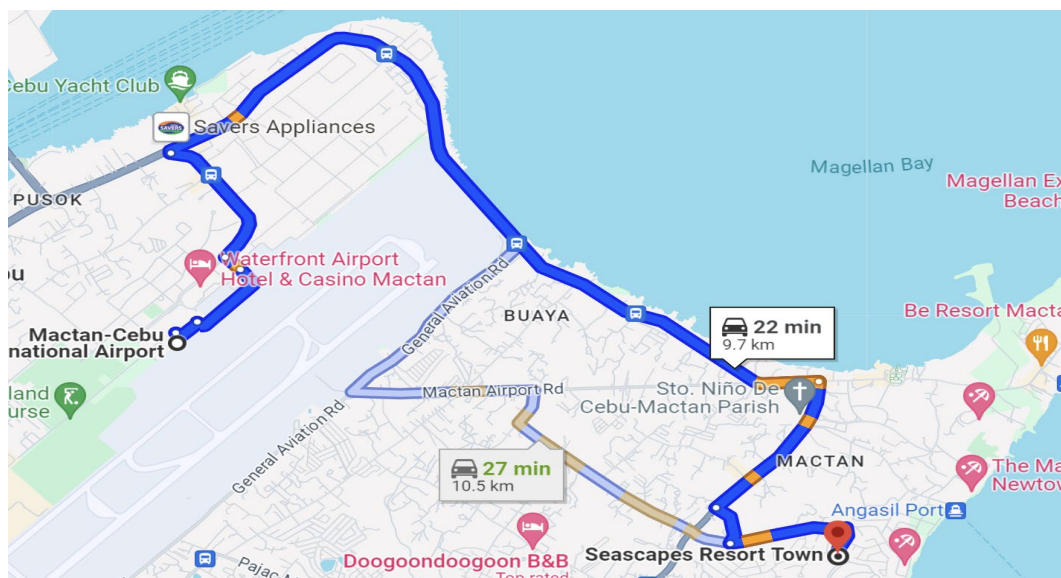
Campus Map



University of the Philippines Performing Arts Hall
8VCX+G5X, Gorordo Ave, Cebu City, 6000 Cebu, Philippines

Auxiliary venue for group meeting and banquet

CRIMSON RESORT & SPA MACTAN, CEBU (<https://www.crimsonhotel.com/mactan>)
Address: Seascapes Resort Town, Mactan Island, Lapu Lapu City, Cebu 6015 Philippines
Cebu / Local Clients: Telephone or Landline: +63 32 401 9999 | +63 32 239 3900
Manila Clients: Mobile No.: 09989649672 from 9 am to 6 pm
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