# CONTENTS

<ul> <li>Welcome Message</li> </ul>	2
<ul><li>Committee</li></ul>	3
<ul><li>Keynote Speech</li></ul>	6
<ul><li>Conference Agenda</li></ul>	11
<ul><li>Detail Program</li></ul>	12
<ul><li>Poster Session</li></ul>	20
<ul><li>Conference Date</li></ul>	21
<ul><li>Useful Information</li></ul>	21

# Welcome Message

Hello, Welcome to the conference 21st International Conference on Computer Applications (ICCA 2024) in Yangon on 16th March, 2024.

The ICCA 2024, organized by University of Computer Studies, Yangon under Ministry of Science and Technology, Myanmar, provides a forum for the presentation of technological advances and current research results in the fields of theoretical, experimental, and applied computing and technologies. ICCA 2024, the 21<sup>st</sup> in the series that has been held annually since 2003, will bring together leading engineers and scientists in computer and information technology from around the world.

This ICCA 2024 conference offers an excellent opportunity to learn and share the latest developments to interact with leading experts in the field to strengthen the research laboratories and universities.

Prof. Mie Mie Khin Rector University of Computer Studies, Yangon

# **Committee**

## **ICCA Organizing Committee**

#### **Conference Chair**

Prof. Mie Mie Khin, Rector, University of Computer Studies, Yangon, Myanmar

## **Conference Organizing Committee Members**

Prof. Yadana Thein, Pro-rector, University of Computer Studies, Yangon, Myanmar

Prof. Htar Htar Lwin, Pro-rector, University of Computer Studies, Yangon, Myanmar

Prof. Soe Soe Aye, Pro-rector, University of Computer Studies, Yangon, Myanmar

Prof. Tin Nu Nu Lwin, Pro-rector, University of Computer Studies, Yangon, Myanmar

Prof. Aye Aye Thin, University of Computer Studies, Yangon, Myanmar

Prof. Khin Mar Soe, University of Computer Studies, Yangon, Myanmar

Prof. Khaing Khaing Wai, University of Computer Studies, Yangon, Myanmar

Prof. Nilar Aye, University of Computer Studies, Yangon, Myanmar

Prof. Tin Thein Thwel, University of Computer Studies, Yangon, Myanmar

Prof. Moe Moe Hlaing, University of Computer Studies, Yangon, Myanmar

Prof. Thandar Htoon, University of Computer Studies, Yangon, Myanmar

Asso. Prof. Lai Lai Thein, University of Computer Studies, Yangon, Myanmar

Asso. Prof. Aye Aye Khine, University of Computer Studies, Yangon, Myanmar

#### **Technical Program Committee Chair**

Prof. Khin Mar Soe, University of Computer Studies, Yangon, Myanmar

Prof. Win Pa Pa, University of Computer Studies, Yangon, Myanmar

#### **Technical Program Committee Members**

Prof. Mie Mie Khin, University of Computer Studies, Yangon, Myanmar

Prof. Thandar Thein, University of Computer Studies, Maubin, Myanmar

Prof. Thinn Thu Naing, University of Computer Studies, KyaingTong, Myanmar

Prof. Khin Mar Lar Tun, University of Computer Studies, Hpaan, Myanmar

Prof. Ei Ei Hlaing, University of Computer Studies, Taungoo, Myanmar

Prof. Soe Soe Khaing, University of Computer Studies, Monywa, Myanmar

Prof. Soe Linn Aung, University of Computer Studies, Magway, Myanmar

- Prof. Myo Min Than, University of Computer Studies, Lashio, Myanmar
- Prof. Tun Min Naing, University of Computer Studies, Pathein, Myanmar
- Prof. Aung Myint Aye, University of Computer Studies, Dawei, Myanmar
- Prof. Zaw Tun, University of Computer Studies, Sittwe, Myanmar
- Prof. Yuzana, University of Computer Studies, Pyay, Myanmar
- Prof. Thein Than Thwin, University of Computer Studies (Pakokku), Myanmar
- Prof. Tin Myat Htwe, University of Information Technology, Yangon, Myanmar
- Prof. Wint Thida Zaw, University of Computer Studies (Thaton), Yangon, Myanmar
- Prof. Myat Thuzar Tun, Myanmar Institute of Information Technology, Myanmar
- Prof. Hla Myo Tun, Yangon Technological University, Myanmar
- Prof. Yutaka Ishibashi, Nagoya Institute of Technology, Japan
- Prof. Tang Enya Kong, Universiti Sains Malaysia, Malaysia
- Prof. Andrew Lewis, Griffith University, Queensland, Australia
- Prof. Tamman Tillo, Indraprastha Institute of Information Technology Delhi, India
- Prof. Mie Mie Tin, University of Technology, Yatanarpon Cyber City, Myanmar
- Prof. Khin Mar Soe, University of Computer Studies, Yangon, Myanmar
- Prof. Khaing Khaing Wai, University of Computer Studies, Yangon, Myanmar
- Prof. Nilar Aye, University of Computer Studies, Yangon, Myanmar
- Prof. Tin Thein Thwel, University of Computer Studies, Yangon, Myanmar
- Prof. Myat Thida Mon, University of Information Technology, Yangon, Myanmar
- Prof. Aung Htein Maw, University of Information Technology, Yangon, Myanmar
- Prof. Than Than Nwe, University of Information Technology, Yangon, Myanmar
- Prof. Aung Nway Oo, University of Information Technology, Yangon, Myanmar
- Prof. Win Lelt Lelt Phyu, University of Computer Studies, Yangon, Myanmar
- Prof. Thin Lai Lai Thein, University of Computer Studies, Yangon, Myanmar
- Prof. Win Pa Pa, University of Computer Studies, Yangon, Myanmar
- Prof. Ange Htwe, University of Computer Studies, Yangon, Myanmar
- Prof. Si Si Mar Win, University of Computer Studies, Yangon, Myanmar
- Prof. Tin Zar Thaw, University of Computer Studies, Yangon, Myanmar
- Prof. Amy Tun, University of Computer Studies, Yangon, Myanmar
- Prof. Yu Yu Than, University of Computer Studies, Yangon, Myanmar
- Prof. Yi Yi Hlaing, University of Computer Studies, Mandalay, Myanmar
- Prof. Thin Thin Wai, University of Information Technology, Yangon, Myanmar
- Prof. Zar Zar Linn, Myanmar Institute of Information Technology, Myanmar
- Prof. Zar Chi Su Su Hlaing, Myanmar Institute of Information Technology, Myanmar

Prof. Nu War, Myanmar Institute of Information Technology, Myanmar

Assoc. Prof. Zin Mar Win, University of Computer Studies, Mandalay, Myanmar

Assoc. Prof. Aye Mya Hlaing, University of Computer Studies, Yangon, Myanmar

Assoc. Prof. Kyar Nyo Aye, University of Computer Studies, Taunggyi, Myanmar

Assoc. Prof. Aye Myat Myat Paing, University of Information Technology, Yangon, Myanmar

Assoc. Prof. Zin Thu Thu Myint, University of Computer Studies, Yangon, Myanmar

Assoc. Prof. Tin Tin Htar, University of Computer Studies, Yangon, Myanmar

Assoc. Prof. Win Win Thant, University of Information Technology, Yangon, Myanmar

Assoc. Prof. Thet Thet Zin, University of Information Technology, Yangon, Myanmar

Dr. Hsu Myat Mo, University of Computer Studies, Yangon, Myanmar

Dr. Yadanar Oo, University of Computer Studies, Yangon, Myanmar

Dr. Haymar Soe Naing, University of Computer Studies, Yangon, Myanmar

Dr. Cho Cho San, University of Computer Studies, Yangon, Myanmar

Dr. Aye Nyein Mon, University of Computer Studies, Yangon, Myanmar

# **Keynote Speech**

#### **Prof. Jong Won Kim**

Head of AI Graduate School, GIST, KR, Korea

- **Date and Time:** March  $16^{th}$  (Sat) 09:30 am 10:00 am
- **Title:** Cloud-native & Data-centric Computing for Live X+AI Services Realization



#### **Abstract**

In this keynote talk, we will discuss how to prepare a futuristic HPC-AI-leveraged computing environment to enable the seamless live interaction of training and inferencing for emerging X+AI services. By aligning with the D-N-A (Data-Networking-AI) paradigm, the upcoming ICT infrastructure preparation for the on-going digital transformation will leverage the latest trends for cloud-native and data-centric edge-to-exascale computing paradigm to facilitate open and federated collaboration of diversified R&D communities.

#### Biography:

Dr. Jong Won Kim received Ph.D. degree in Control and Instrumentation Engineering from Seoul National University, Seoul, Korea, in 1994. In 1994-1999, he was with the Department of Electronics Engineering at the KongJu National University, KongJu, Korea, as an Assistant Professor. From 1997 to 2001, he was visiting the Signal & Image Processing Institute (SIPI) of Electrical Engineering - Systems Department at the University of Southern California, Los Angeles, USA, where he has served as a Research Assistant Professor since Dec. 1998. From Sept. 2001, he has joined Gwangju Institute of Science & Technology (GIST), Gwangju, Korea, where he is now working as the dean of GIST AI Graduate School, which was established late 2019 as one of 10 government-sponsored AI graduate schools in Korea. He has been directing GIST SCENT (Super Computing cENTer) since 2008, where Top-500-listed DREAM-AI super computer has begun its operation of open HPC-AI computing services from 2022. Also he has been directing Networked Intelligence Lab. (renamed from Networked Computing Systems Lab.) from 2001, where he has been researching networked system topics under the slogan of "Sustainable Orchestration of AI-inspired Digital-Twin Services employing Open Software-Defined Infrastructure and Common Cloud-native Platforms". Around these topics, he has co-authored more than 500 technical publications in academic journals and conferences. Dr. Kim is the senior member of IEEE, and the members of ACM, SPIE, KICS, IEEK, KIISE, and KIPS. He has been serving and served as the editorial board member of Elsevier JVIS, Elsevier ICT Express, KIISE, KIPS, and KICS Journals. He has served as various committee members (General co-chairs, TPC co-chairs and members) of international and domestic conferences/workshops of IEEE, ACM, SPIE, and others. Also, he has/had been involved with several domestic and international working group activities based on the global R&E networks, including Technology Area director, HDTV and Cloud WG chairs of APAN (Asia-Pacific Advance Network), Steering Group member of AsiaFI (Asia Future Internet), Forum chair and Testbed WG chair of FIF (Future Internet Forum in Korea), Forum operation chair of MEC (Multi-access Edge Computing in Korea), and Forum vice-chair of Korea Super Computing.

# **Keynote Speech**

#### Prof. G R Sinha

Provost (Vice Chancellor), GSFC University Vadodara, Gujarat, India

• **Date and Time:** March 16<sup>th</sup> (Sat) 10:30 am – 11:00 am

• **Title:** AI Intervention for Sustainable and Preventive Healthcare



#### **Abstract:**

This lecture highlights the role of AI in studying the impact of traditional knowledge of Yoga and meditation for Sustainable and Preventive Health Care. Scientifically the impact of all mindfulness practices are not available much though there are some psychometric data based analysis that tells the impact of traditional practices such as Meditation and Yoga. This talk would highlight some practical experience and subjects and role of AI intervention in pragmatic ways of impact analysis of the mindfulness practices for mental wellbeing and healthcare.

#### Biography:

**Prof. G R Sinha** (PhD, Fellow IETE, Fellow IEI, SMACM, SMIEEE) is Vice Chancellor of GSFC University Vadodara, Gujarat, India. Prior to this, he was Professor at the International Institute of Information Technology Bangalore (IIITB). He served as Professor at Myanmar Institute of Information Technology (MIIT) Mandalay Myanmar on deputation in a friendship project between Government of India and Government of Republic of Myanmar. He has been Visiting Professor in National Chung Hsing University Taiwan; at University of Sannio Italy and Visiting Professor (Honorary) in Sri Lanka Technological Campus Colombo.

# **Keynote Speech**

**Dr. Kazutaka Kikuta**Researcher, National Institute of Information and Communications Technology, Japan

• **Date and Time:** March 16<sup>th</sup> (Sat) 13:00 am – 13:20 am

 Title: Smoke detection based on optical flow using visual IoT footage



**Abstract:** Detecting fires in fields is crucial, and smoke often acts as a precursor to fires. Utilizing visual data from outdoor cameras that monitor fields is an effective method for early detection. Previous attempts using optical flow methods with digital cameras have not been entirely successful due to the challenge of smoke occupying a small area in outdoor camera footage. Additionally, distinguishing smoke from other moving objects like cars, trees, and turbines in urban areas is difficult. In our presentation, we introduce a new approach to detect daytime smoke by analyzing optical flow variance and HSV color characteristics. We applied this method to footage from an industrial zone in Japan collected over a few days, achieving successful results with over 90% smoke detection accuracy.

#### Biography:

**Kazutaka Kikuta** received the M.S. degree in 2014 and Ph.D. degree in 2017 from the University of Tokyo, Japan. He is currently working on image analysis using visual IoT at the National Institute of Information and Communications Technology.

# **Keynote Speech**

#### Dr. Kanokvate Tungpimolrut

Research fellow/ Research Group Director, National Electronics and Computer Technology Center, Thailand

• **Date and Time:** March 16<sup>th</sup> (Sat) 13:20 am – 13:30 am

• **Title:** Visual IoT System for Smoke/Fire Detection in Chiang Mai (Thailand)



#### **Abstract:**

In Thailand, the air pollution problem due to PM2.5 and PM10 are still the main issues that have to be solved sustainably. From the media, Chiang Mai was ranked as the top 10 most major cities in the world for air quality problems which had PM2.5 level exceeded the standard and posed a health hazard. It has been found that the problem from forest fire is occurred annually. It is found that about 92% of the burned area in Chiang Mai are in the conservation forest and national park. However, with the problem of high steep mountainous terrain in conservation and national parks and insufficient patrol staff, it is very difficult to do the effective monitoring and firefighting task with a quick response.

Speed in evaluating, announcing, and distributing news about the situation in the event of a forest fire has a great effect on reducing or preventing damage that may occur both to life and property in the area of the disaster. Using Visual IoT in the forest fire monitoring system will increase the ability to accurately assess and provide information about the situation of the scene quickly. This is because the real-time images and videos from Visual IoTs of the scene can easily interpret the results more quickly than the observation by human perspective. When the forest fire is detected at the beginning stage, it is easier to control and put out the fire. Consequently, air pollution could be reduced and managed more effectively.

#### Biography:

**Kanokvate Tungpimolrut** was born in Bangkok, Thailand, in 1968. He received the B.Eng. degree in electrical and electronics engineering from King Mongkut's Institute of Technology Ladkrabang, in 1989, and the M. Eng. as well as D. Eng. degree in electrical and electronics engineering from Tokyo Institute of Technology, in 1992 and 1995, respectively.

Following receipt of the D.Eng. degree, he was a researcher with Fuji Electric Co., Ltd. Since 1996, he has been a researcher with National Electronics and Computer Technology Center, Thailand. His research interests are motor and drive system, industrial electronics as well as intelligent system and automatic control.

## **Conference Agenda**

# The 21<sup>st</sup> International Conference on Computer Applications (ICCA 2024) 16<sup>th</sup> March, 2024

## **University of Computer Studies, Yangon**

Time	Place	Agenda		
8:30 – 9:00	UCSY Lobby	Registration		
9:00 – 9:10	UCSY Conference Hall	Opening Speech by Union Minister for Science and		
2.00 2.10	COST COMPTENCE Han	Technology, MOST		
9:10 – 9:15	UCSY Conference Hall	Opening Speech by Chief Minister for Yangon Region		
7.10 7.13	CCS1 Conference Hun	Government		
9:15 – 9:20	UCSY Conference Hall	Welcome Speech by Director General for Department		
J.13 J.20	COST COMPTENCE Han	of Advanced Science and Technology, MOST		
9:20 – 9:25	UCSY Conference Hall	Welcome Remark by Rector, UCSY		
9:25 – 9:30	UCSY Conference Hall	Photo Session		
9:30 – 10:00	UCSY Conference Hall	Keynote Speech I		
10:00 - 10:30		Coffee Break		
10:30 – 11:00	UCSY Conference Hall	Keynote Speech II		
11:00 – 12:00		Parallel Sessions		
	Paper Session I	Natural Language Processing and Speech Processing		
11:00 – 12:00	Paper Session II	Image Processing I		
11.00 – 12.00	Paper Session III	Data Mining and Machine Learning I		
	Paper Session IV	IoT, Communication, Circuits and Devices		
	Paper Session V	Geographical Information Systems		
12:00 – 13:00		Lunch Break		
13:00 – 13:20	UCSY Conference Hall	Keynote Speech III		
13:20 – 13:30	UCSY Conference Hall	Keynote Speech IV		
13:30 – 14:30		Parallel Sessions		
	Paper Session VI	Natural Language Processing and Machine Learning		
12.20 14.20	Paper Session VII	Big Data and Cloud Computing		
13:30 – 14:30	Paper Session VIII	Data Mining and Machine Learning II		
	Paper Session IX	Networking and Cyber Security		
	Paper Session X	Image Processing II		
14:30 – 15:00	Coffee Break & Poster Session			
15:00 – 16:20	Parallel Sessions			
15:00 – 16:20	Paper Session XI	Big Data and Machine Learning		

	Paper Session XII	Image Processing III
	Paper Session XIII	IoT, Networking and Cyber Security
Paper	Paper Session XIV	Geographical Information Systems and Image
	1	Processing

#### **Keynote Speech I**

Place – UCSY Conference Hall

Time -9:30-10:00

Time	Name	Title	Organization
9:30 –10:00	Prof. Jong Won Kim	Cloud-native & Datacentric Computing for Live X+AI Services Realization	AI Graduate School, GIST, KR, Korea

#### Break - 10:00 - 10:30

#### **Keynote Speech II**

Place – UCSY Conference Hall

Time -10:30-11:00

Time	Name	Title	Organization
10:30 – 11:00	Prof. G R Sinha		GSFC University Vadodara, Gujarat, India

#### Paper Session I: Natural Language Processing and Speech Processing

Chair — Prof. Win Pa Pa
Place — Digital Library
Time — 11:00 — 12:00

<sup>\*</sup>Those authors will make the presentation virtually via online.

No.	Name	Title	Organization
1.	Myat Aye Aye Aung, Win Pa Pa	End-to-End Sequence Labeling for Myanmar Speaker Diarzation	University of Computer Studies, Yangon

2.	Nang Zin Min Aye, Khin Mar Soe	Analysis of Subword Tokenization for Transformer Model in Neural Machine Translation between Myanmar and English Languages	University of Computer Studies, Yangon
3	*Theint Shwe Yee Win	Authorship Identification System Using Word2Vec Word Embedding Model	University of Computer Studies, Mandalay

#### Paper Session II: Image Processing I

Chair — Prof. Ei Ei Hlaing
Place — Resource Center
Time — 11:00 — 12:00

Note: Oral presentations have been allocated 20 minutes of effective presentation time, including Q/A time between session chair and speakers.

<sup>\*</sup>Those authors will make the presentation virtually via online.

No.	Name	Title	Organization
1.	*Ba Doun Mar, Nandar Win Min	Investigation of Casual Factors on Traffic Accidents Using Mutual Information	University of Computer Studies (Mandalay)
2.	*Win Pa Pa San, Sai Maung Maung Zaw	Indoor Accidents Detection for Elderly based on Features Fusion and LSTM	University of Computer Studies, Mandalay
3.	*Aye Thida Win, Khin Mar Soe, Myint Myint Lwin	Rice Disease Classification for Eastern Shan State Using Deep Learning	University of Computer Studies (Kyaing Tong)

#### Paper Session III: Data Mining and Machine Learning I

Chair — Prof. Khin Mar Lar Tun

Place -A002

Time -11:00 - 12:00

<sup>\*</sup>Those authors will make the presentation virtually via online.

No.	Name	Title	Organization
1.	Kyaw Kyaw Khaing, Andrew Lewis		University of Computer Studies, Yangon

2.	Kyu Kyu Win, Yi Yi Hlaing	Relevancy Prediction of Scientific Articles using Similarity Measures and Citation Mention Rate	University of Computer Studies (Hinthada)
3.	*Thu Zar Htet, Win Mar Oo	Mutual Information Ratio-based Approach for Rainfall Prediction with Multicollinearity	University of Computer Studies, Mandalay

#### Paper Session IV: IoT, Communications, Circuits and Devices

Chair – Prof. Thandar Thein

Place -A003

Time -11:00-12:00

Note: Oral presentations have been allocated 20 minutes of effective presentation time, including Q/A time between session chair and speakers.

No.	Name	Title	Organization
1.	Shwe Sin Myat Than, Akari Myint Soe, Aung Htein Maw	Investigation of Oversampling in IoT-IDS	University of Information Technology
2.	Hnin Ngwe Yee Pwint, Tin Tin Hla	Performance Analysis of Full Adder using Different CMOS Technology	Mandalay Technological University
3.	Myat Mon Aye, Thaw Tun Ko	Simulation on Radiation Attenuation Properties of Some Polymers for Gamma- ray Shielding Using Monte Carlo program	Mandalay Technological University

#### Paper Session V: Geographic Information Systems

Chair – Dr. Kanokvate Tungpimolrut

Place – UCSY Conference Hall

Time -11:00 - 12:00

No.	Name	Title	Organization
1.	Zin May Oo,Thin Lai Lai Thein	Estimation of Annual Deforestation Using Random Forest	University of Computer Studies, Yangon
2.	Khant Khant Win Tint, Mie Mie Tin	Digital Restoration of Ancient Murals: Assessing the Efficacy of Coherent Transport Inpainting with Damage Ratio Analysis	University of Technology (Yatanarpon Cyber City)

3.	Moe Moe Myint, Thin Lai Lai Thein	Flood Mapping System of Flooding prone area in Myanmar	University of Computer Studies, Yangon	
----	---	--	--	--

#### Lunch Break - 12:00 - 13:00

#### **Keynote Speech III**

Place – UCSY Conference Hall

Time -13:00-13:20

Time	Name	Title	Organization
13:00 –13:20	Dr. Kazutaka Kikuta	Smoke detection based on optical flow using visual IoT footage	National Institute of Information and Communications Technology, Japan

#### **Keynote Speech IV**

Place – UCSY Conference Hall

Time -13:20-13:30

Time	Name	Title	Organization
13:20 –13:30	Dr. Kanokvate Tungpimolrut	Visual IoT System for Smoke/Fire Detection in Chiang Mai (Thailand)	National Electronics and Computer Technology Center, Thailand

#### Paper Session VI: Natural Language Processing and Machine Learning

Chair — Prof. Khin Mar Soe
Place — Digital Library
Time — 13:30 — 14:30

<sup>\*</sup>Those authors will make the presentation virtually via online.

No.	Name	Title	Organization
1.	Hay Man Oo, Win Pa Pa	Myanmar News Retrieval using Kernelized Neural Ranking Model	University of Computer Studies, Yangon
2.	*San San Maw, Ei Cherry Lwin, Win Mar, Naw Sharo	Sentiment Analysis with YouTube Comments using Deep Learning Approaches	University of Computer Studies (Maubin)

	Paw, Myat Mon Khaing, Thet Thet Aung		
3.	*Nang La Min Thar	Detection of Disaster Situational Awareness Tweets Using Ensemble Learning	University of Computer Studies, Mandalay

#### Paper Session VII: Big Data and Cloud Computing

Chair – Prof. Thein Than Thwin

Place – Resource Center Time – 13:30 – 14:30

Note: Oral presentations have been allocated 20 minutes of effective presentation time, including Q/A time between session chair and speakers.

No.	Name	Title	Organization
1.	Thandar Aung, Hnin Thiri Zaw, Aung Htein Maw, Myat Thida Mon	A Systematic Review: Big Data Analytics in Network Environment	University of Information Technology
2	Myo Thant Aung, Nwe Nwe Myint Thein	NFT-based Certificates and Proof of Delivery in Education Sector with Ethereum Blockchain	University of Information Technology
3.	Khant Hmue, Myat Pwint Phyu, Sithu Kyaw, Aye Myat Myat Paing	Toward Context-Aware Notification Service in Universities	University of Information Technology

#### Paper Session VIII: Data Mining and Machine Learning II

Chair – Prof. Win Lelt Lelt Phyu

Place – A002

Time -13:30-14:30

<sup>\*</sup>Those authors will make the presentation virtually via online.

No.	Name	Title	Organization
1.	Zayar Aung, Nu Nu War, Aung Kyaw Myo, Gerget Olga Mikhailovna	Experimental study of algorithms for planning the trajectory of a warehouse mobile robot based on reinforcement learning	Tomsk State University

2	*Tin Nilar Win, Nang Khine Zar Lwin	Analysis of Customers Interest for Web Log Clustering	University of Computer Studies (Thaton)
3.	*Ohnmar Hlaing,	Read-Write-Validate Approach for	University of
	Hla Hla Htwe,	Optimistic Concurrency Control about	Computer Studies
	Wai Wai Myint	Michael Kors (MK) Sale Transaction	(Pyay)

#### Paper Session IX: Networking and Cyber Security

Chair – Prof. Aung Htein Maw

Place - A003

Time -13:30-14:30

Note: Oral presentations have been allocated 20 minutes of effective presentation time, including Q/A time between session chair and speakers.

No.	Name	Title	Organization
1.	Khaing Zar Win, Yutaka Ishibashi, Khaing Htet Win	Influence of Local Lag on Reaction Force in Networked Virtual Environment with Haptic Sense	University of Computer Studies, Yangon
2	Kaung Wai Thar, Thinn Thinn Wai	Machine Learning Based Predictive Modelling for Fraud Detection in Digital Banking	University of Information Technology
3.	Mya Sandar Aung, Tin Tin Hla	Two-Port Wideband MIMO Antenna for Sub-6GHz 5G Applications	Mandalay Technological University

#### Paper Session X: Image Processing II

Chair – Prof. Aung Nway Oo Place – UCSY Conference Hall

Time -13:30-14:30

<sup>\*</sup>Those authors will make the presentation virtually via online.

No.	Name	Title	Organization
1.	*Khaing Zar Mhyint Aung, Win Mar Oo	Abnormal Behavior Detection for Driving Assistance in Real-time using Improved YOLO	University of Computer Studies (Hpa-an)
2.	*Nyo Mar Min, May Mon Khaing	Classification for Myanmar Food Image Using DCNN	University of Computer Studies (Taunggyi)

3.	*May Phyo Ko, Chaw Su	Person Posture Estimation Based on Pose Angular Feature and Region Keypoints Detector Network	University of Technology (Yatanarpon Cyber City)
----	--------------------------	---	--

**Break & Poster Session – 14:30 – 15:00** 

#### Paper Session XI: Big Data and Machine Learning

Chair – Prof. Si Si Mar Win
Place – Digital Library
Time – 15:00 – 16:00

Note: Oral presentations have been allocated 20 minutes of effective presentation time, including Q/A time between session chair and speakers.

<sup>\*</sup>Those authors will make the presentation virtually via online.

No.	Name	Title	Organization
1.	Nwe Ni Hlaing, Si Si Mar Win	Improvement of Data Stream Processing using Adaptive Ingestion	University of Computer Studies, Yangon
2.	*Kyi Pyar	Predictive Analytics System Using Big Data Framework	University of Computer Studies (Thaton)
3	*Hsu Zarni Maung, Myo Khaing	Optimizing Hybrid Multi-Task Deep Reinforcement Learning: Diverse Perspectives	University of Computer Studies (Kalay)

#### Paper Session XII: Image Processing III

Chair – Prof. Ah Nge Htwe
Place – Resource Center
Time – 15:00 – 16:20

No.	Name	Title	Organization
1.	Phyo Paing Ko, Htar Htar Lwin, Kyaw Kyaw Lin	Efficient License Plate Recognition System for Urban Security in Myanmar	Myanmar Computer Vision Developer Team
2.	Pyone Pyone Khin, Nay Min Htaik	Gun Detection: A Comparative Study of RetinaNet, EfficientDet and YOLOv8 on Custom Dataset	Mandalay Technological University
3.	Yu Yu Aung, Moe Moe Lwin	Real-Time Object Distance Estimation Based on YOLOv8 Using Webcam	Technological University (Thanlyin)

4.	Khin Ohnmar Maung, Theingi Myint	Enhanced Deep SORT with Class Filtering for ID Switches Minimization in Visual Object Tracking	Mandalay Technological University
----	--	--	---

#### Paper Session XIII: IoT, Networking and Cyber Security

Chair – Prof. Tin Thein Thwel

Place - A002

Time -15:00 - 16:00

Note: Oral presentations have been allocated 20 minutes of effective presentation time, including Q/A time between session chair and speakers.

<sup>\*</sup>Those authors will make the presentation virtually via online.

No.	Name	Title	Organization
1.	May Htet Aung, Tin Tin Hla	A Comparative Study of D-type Flip-flop Architecture Using 90-nm and 45-nm CMOS Technology for High-Performance and Low-Power Systems	Mandalay Technological University
2.	*Khine Zin Thet, Win Lelt Lelt Phyu	Green Chili Pepper Localization system based on Mask R-CNN and IoT	University of Computer Studies, Yangon
3.	*Sai Saw Han, Khaing Khaing Wai	A Performance Analysis of Boosting Algorithms for the Identification of Card Fraud	University of Computer Studies (Myeik)

#### Paper Session XIV: Geographical Information Systems and Image Processing

Chair – Prof. Thin Lai Lai Thein
Place – UCSY Conference Hall

Time -15:00 - 16:20

<sup>\*</sup>Those authors will make the presentation virtually via online.

No.	Name	Title	Organization
1.	*Khin Nwe Oo, Zin Mar Win	Remote Sensing Image Captioning Using Transformer Model and CNN Feature Extraction Model	University of Computer Studies, Mandalay
2.	*Nu Nu Htway, Lwin Mar Thin	Prediction of Land Surface Temperature in Dry Zone, Myanmar Using MODIS Derived NDVI and LST	Technological University (Taunggyi)
3.	*Kay Thinzar Phu, Dr. M.S. Godwin Premi	Proposed CNN Model for Myanmar Traffic Sign Recognition System	Sathyabama Institute of Science and Technology, Chennai, India,

			Myanmar Institute of Information Technology
4.	*Nilar Phyo Wai, Nu War	Text Line Segmentation on Myanmar Handwritten Documents Using Directional Gaussian Filter	University of Computer Studies, Mandalay

## **Poster Session**

### **ICCA 2024 Poster Session**

Place - 1st Floor, Main Building, UCSY

Time - 14:30 - 15:00

No.	Name	Title	Organization
1.	Thet Thet Aung, Myat Mon Khaing, Naw Sharo Paw, April Thet Su, Khin Lay Myint, Hlaing Htake Khaung Tin	Big Data Analytics with Stock Market Price Prediction using Long Short-Term Memory Neural Network	University of Computer Studies (Hinthada)
2.	Ei Ni Tar Tun, Yi Mon Shwe Sin, Khin Mar Soe	Bidirectional Statistical Machine Translation System for Mon and English Language Pair	University of Computer Studies (Pha-an)
3.	Thandar Myint, Khin Mar Soe	Mon Language Word Segmentation Based on Maximum Matching	University of Computer Studies, Yangon
4.	Ei Ei Moe Tun, Kyi Pyar Zaw	Corns Leaf Disease Detection and Prediction using Deep EfficientDet and Faster R-CNN Models	University of Computer Studies, Mandalay
5.	Thaw Thaw May Oo, Khaing Khaing Wai	Security Control in Software Product Key Using Hybrid Encryption Algorithm	University of Computer Studies, Yangon
6.	Min Thway Han, Htar Htar Lwin, Kyaw Kyaw Lin, Hlaing Moe Than	Developing A Super Resolution-Based Face Searching Model for Precise Face Identification	High Education Center
7.	Lwin Lwin Nyo	Emotion Recognition System Based on MFCC with Spectral Subtraction	University of Computer Studies (Pakokku)
8.	Kyault Kyault Khaing, Aye Mya Haling, Yadanar Oo	Sentiment Analysis for Myanmar Language on Social Media Using CNN and BiLSTM	University of Technology (Yatanarpon Cyber City)
9.	Nandar Lin, Thanda Win, Khine Thin Zar	Frequent Itemset Mining Based on Different Minimum Support Using ECLAT Algorithm	Yangon Technological University
10.	Lei Lei Win, Nilar Thein	GIS based Optimal Route Finding System for Fire Emergency Case using Modified A* Algorithm	University of Computer Studies (Thaton)

	Ciin Zam Man, Si
11.	Si Mar Win, Kyi
	Lai Lai Khine

Study of Machine Translation for Myanmar-Chin (Tedim) Language

University of Computer Studies, Yangon

# **Conference Date**

## **Opening Reception**

• **Date & Time**: March 16<sup>th</sup> (Sat) 08:30 – 10:00

• Location: University of Computer Studies,

Yangon, Myanmar



# **Useful Information**

## **Registration Desk:**

Location: UCSY Lobby, University of Computer Studies, Yangon, Myanmar

Operation Hours: March 16<sup>th</sup> (Sat). 08:30 am – 10:00 am