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SMA2024

Conference Program Book

The 13th International Conference on Smart Media & Applications

Conference Theme

AI and Intelligent Systems: Shaping the Future of Social Humanity

December 19~22, 2024

National University of Laos(Sokpaluang Campus), Vientiane, Laos

Co-Hosted by



Smart Media
KOREAN INSTITUTE OF SMART MEDIA



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The 13th International Conference on **Smart Media & Applications**

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AI and Intelligent Systems: Shaping the Future of Social Humanity

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National University of Laos(Sokpaluang Campus), Vientiane, Laos

📍 National University of Laos, Sokpaluang Campus, Sisattanak District, Vientiane Capital, Lao PDR



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Smart Media
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SMA2024
Website QR



Opening Address

President, Korean Institute of Smart Media
General Chair, SMA 2024
Professor, Ph.D, Si Cheon You



Dear esteemed colleagues and participants,

It is my great pleasure to welcome you all to the 13th International Conference on Smart Media and Applications (SMA 2024), held at the National University of Laos from December 19th to 22nd, 2024. This year's theme, "AI and Intelligent Systems: Shaping the Future of Social Humanity," reflects the transformative role of AI in addressing critical issues such as healthcare, education, and sustainability.

As we gather here in Vientiane, we have the opportunity to explore how AI and intelligent systems can help shape a better future for humanity. Through the presentations and discussions at SMA 2024, we will examine the practical applications of AI in diverse fields like smart cities, digital media, and intelligent transportation.

I would like to express my heartfelt gratitude to Prof. Dexanourath SENEDUANGDETH, President of the National University of Laos, for his unwavering support in making this conference a reality. I am also honored to welcome our keynote speaker, Prof. Noda Itsuki, former president of the Japanese Society for Artificial Intelligence (JSIAI), whose contributions to AI have been groundbreaking.

To all our speakers and participants, I extend my deepest thanks. Your dedication to advancing smart media and intelligent systems is what drives this conference forward. I am confident that the insights and collaborations that emerge from SMA 2024 will help shape future innovations.

Thank you, and welcome to SMA 2024. I hope you enjoy the conference and your time in Vientiane.

Sincerely,
President, Korean Institute of Smart Media
Si Cheon You, Professor

Welcome Address

Dean of Faculty of Engineering
National University of Laos
Assoc. Prof. Dr. Soulyphan KANNITHA



Dear Participants

On behalf of the organizing committee, I am delighted to extend my warmest welcome to all participants of this conference. We are honored to host researchers, professionals, and enthusiasts from various universities and institutions around the world. Your presence enriches this event and reflects the importance of global collaboration in advancing knowledge and innovation.

This conference provides a unique platform for exchanging ideas, sharing experiences, and engaging in meaningful discussions. It is an excellent opportunity to explore new perspectives, connect with experts from diverse fields, and establish collaborations that transcend borders and disciplines.

We are confident that the insights and findings shared during this event will significantly contribute to academic and professional growth, fostering innovation and progress in our respective fields.

Thank you for your participation, and we look forward to the productive exchanges and fruitful collaborations that will emerge from this gathering.

Sincerely,
Sincerely, Assoc. Prof. Dr. Soulyphan KANNITHA

Keynote Speaker

Faculty of Information Science and
Technology Hokkaido University
Professor Dr. Noda Itsuki



Topic

Multi-agent Social Simulation for MaaS and Other Social Service

Abstract

MaaS (mobility as a service) and smart transportation are key topic for sustainable societies. Multi-agent social simulation (MASS) is a core technology to solve complicated social issues like designing public transportation. In this talk, I like to present a successful application of MASS to design and evaluate taxi-sharing service called SAVS (smart access vehicle service). The service is widely operated more than 50 places in Japan by MiraiShare, a venture company established by professors that work on MASS researches. This talk also mention about the wide possibility of MASS researches to solve various social issues.

Speaker's Bio

Dr. Itsuki Noda is a professor of Research Faculty of Information Science and Technology in Hokkaido University, Japan. He received the B.E., M.E. and Ph.D., degrees in engineering from Kyoto University, Japan, in 1987, 1989, and 1995, respectively. He worked at Electrotechnical Laboratory (ETL) and National Institute of Advanced Industrial Science and Technology as a senior researcher since 1992 and 2000. He moved to Hokkaido University as a professor since 2021. He was also a visiting researcher of Stanford University in 1999, and worked as a staff of Council of Science and Technology Policy of Japanese government in 2003. He was a founding member of RoboCup and promoted Soccer Simulation League since 1995. He was the president of RoboCup Federation during 2014 to 2017. He was also the president of Japanese Society of Artificial Intelligence during 2020 to 2022. His main research domain covers multiagent social simulation, machine learning, RoboCup and disaster mitigation information. He and his colleagues founded a venture company, Mirai Share, which provides taxi-share service based on a result of the social simulation research, in 2016.

Tutorial Speaker 1

Deputy Head of Department of Computer Engineering
and Information Technology
Faculty of Engineering, National University of Laos
Professor Dr. Vimontha KHIEOVONGPHACHANH



Topic

**Collaboration for the Future: Research and Technical Activities
in the Department of Computer Engineering and Information Technology**

Abstract

The Department of Computer Engineering and Information Technology is deeply engaged in cutting-edge research and technical activities, particularly in emerging fields like IoT and blockchain. Our research efforts include the integration of blockchain technology for organic food tracking in Laos, as well as the development of a Smart Monitoring System for assessing climate change and environmental impacts in manufacturing companies. Additionally, the department promotes collaborative group activities across various key areas, including IoT, software development, media processing, robotics, networking, cybersecurity, and IT support. These initiatives aim to foster innovation and knowledge-sharing, offering students and researchers hands-on experience in addressing real-world challenges while advancing technological progress.

Speaker's Bio

Dr. Vimontha Khieovongphachanh is the Deputy Head of the Department of Computer Engineering and Information Technology at the National University of Laos, where she is responsible for administrative duties and academic collaboration. She also serves as an Assistant Professor in the Faculty of Engineering. Her teaching areas include Image Processing and Programming Languages. Dr. Vimontha earned her B.S. degree in Telecommunication Engineering from the National University of Laos, an M.S. degree in Electrical Engineering from Chulalongkorn University in Thailand, and a Ph.D. in Science and Technology from Tokai University in Japan.

Tutorial Speaker 2

Department of Industrial Design,
KAIST
(Korea Advanced Institute of Science and Technology)
Adjunct Professor Dr. EK(Eunkyong) Baek



Topic

AI-enhanced Design Thinking

Abstract

In this tutorial, participants will explore how artificial intelligence can elevate the design thinking process concerning various topics of smart media and applications. We will examine AI's role in enhancing each stage of the design thinking methodology—from empathizing and problem definition to ideation, prototyping, and testing. Through hands-on activities and case studies, attendees will learn how to leverage AI tools to foster creativity, streamline processes, and address complex challenges within Smart Applications and Social Systems.

Speaker's Bio

EK(EunKyong) Baek is an Adjunct Professor in the Department of Industrial Design at KAIST, South Korea. With a BSc in Industrial Design, an MA in Design Management, and a PhD in Design Management, her research interests include design and brand management, marketing strategy, and intellectual property law. She has held roles in academia in the UK and Germany also worked at a patent law firm in Germany. EK has published extensively on design management and has led workshops and projects in international settings, contributing to developing design strategies in global markets.

Conference Theme

AI and Intelligent Systems: Shaping the Future of Social Humanity




Program at a Glance

Thursday (Dec. 19)		
13:00~	Registration Open	
14:20~18:00	Parallel Session (Welcome Greeting, Board Meeting)	
18:30~21:00	Reception	
Friday (Dec. 20)		
09:00~	Registration	Registration Desk
10:00~10:30	Opening Ceremony, Welcome Speech	Auditorium, 3 rd floor, EN Building
10:30~11:30	Keynote Speech & Invited Talk Session	Auditorium, 3 rd floor, EN Building
11:30~13:00	Luncheon Time	
13:00~14:20	Parallel Session 1, 4 / Posters Session 1	
14:20~14:40	Coffee Break	
14:40~16:00	Parallel Session 2, 5 / Posters Session 2	
16:00~16:20	Coffee Break	
16:20~17:40	Parallel Session 3, 6, 7	
18:30~20:00	Banquet	Diamond Room, 4F Landmark Mekong Riverside Hotel, Diplomatic Residential Compound
Saturday (Dec. 21)		
10:00~11:30	Tutorial 1 (Collaboration for the future)	Hall 1, 1 st floor, IT Building
11:30~13:00	Luncheon Time	
13:00~14:20	MOU (KISM – NUoL)	Hall 1, 1 st floor, IT Building
14:20~14:40	Coffee Break	
14:40~17:40	Tutorial 2 (AI-enhanced Design Thinking)	Hall 1, 1 st floor, IT Building
Sunday (Dec. 22)		
10:00~11:30	SMA Annual Business Meeting	
11:30~13:00	Luncheon Time	
11:00~12:30	Conference Closing (Best Paper Awards, Special Thanks)	
Conference Ends at 14:40		

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The 13th International Conference on Smart Media & Applications

Parallel Sessions 1

 Time	December 20 Friday (13:00 ~ 14:20)
 Room	Hall 2, 2 nd Floor, IT Building
 Session Chair	Kyungbaek Kim, Chonnam National University



01 (28)	Title	Review of Selective Assembly Algorithms: Focus on Time Efficiency and Accuracy Enhancement
	Authors	<i><u>Hyobin Son</u>, Kyohong Jin</i>
02 (29)	Title	Automatic Sleep Stage Classification Based on Sleep Event Detection Using Signal Processing Techniques
	Authors	<i><u>Young-Tak Kim</u>, Kyohong Jin</i>
03 (30)	Title	Enhancing Cloud System Monitoring with Dynamic Thresholds for Anomaly Detection
	Authors	<i><u>Hyeonmin Je</u>, Kyohong Jin</i>
04 (20)	Title	Research Trend Analysis of Lipid Nanoparticle Using Topic Modeling and LLM: Utilizing PubMed Abstract Data
	Authors	<i><u>Hyukjun Choi</u>, Jisun Hwang, Juyoung Kang</i>
05 (37)	Title	Evaluating Lazy and Non-Lazy Execution Strategies in Spark for Big Data Processing Optimization
	Authors	<i><u>Thi-Thu-Trang Do</u>, Thi-Thuy-Linh Tong, Viet-Anh Nguyen, Manh-Hung Ngo, Van-Quyet Nguyen, Quyet-Thang Huynh</i>

Parallel Sessions 2

 Time	December 20 Friday (14:40 ~ 16:00)
 Room	Hall 2, 2 nd Floor, IT Building
 Session Chair	Jae-Young Pyun, Chosun University

01 (02)	Title	Map Sharing for Multi-Robot Control Based on ROS2
	Authors	<i><u>Minsoo Park</u>, Myoungjae Jun, Hieyong Jeong</i>
02 (18)	Title	Optimized Object Detection Model for Automated Skin Disease Analysis, Mariam Binte Bashir
	Authors	<i><u>MD Ilias Bappi</u>, Mithila Arman, Kyungbaek Kim</i>
03 (27)	Title	Anomaly Periods Detection in Injection Machine using TadGAN
	Authors	<i><u>Hyerim Ju</u>, Wang-Su Jeon, Sang-Yong Rhee</i>
04 (39)	Title	Research on building a Q&A system to improve financial literacy using RAG
	Authors	<i>Ming Wang, <u>Donghyeon Lee</u>, Eunhye Hwang, Hansol Lee</i>
05 (41)	Title	Creating LLM-based game NPCs: A study on the design of prompts centered on quality assessment
	Authors	<i><u>Hongjun Choi</u>, Dong-Lyeor Lee, HaeSin Ro, Jongho Lee, Byungpyo Kyung</i>

Parallel Sessions 3

 Time	December 20 Friday (16:20 ~ 17:40)
 Room	Hall 2, 2 nd Floor, IT Building
 Session Chair	Eunkyoung Baek, Korea Advanced Institute of Science and Technology

01 Title **Emotion Recognition Using RGB and Thermal Image Fusion**
 (04) Authors *Tuan-Khoi Tran, Soo-Hyung Kim, Hyung-Jeong Yang, Seung-Won Kim, Xiaojing Chen*

02 Title **Optimizing AI Data through Document Image Quality Evaluation and Data Refinement**
 (05) Authors *Yesim Selcuk, Jin Jeon, Eunhui Kim, Myung-seok Choi*




03 Title **Constructing Bi-lingual Chart and Text Dataset with Multi-modal Generative Language Model**
 (06) Authors *Eunhui Kim, Yesim Selcuk, Sengwoo Lee, Inseong Ahn, Myung-seok Choi, Jinseop Shin*

04 Title **MAE-fViT: Fine-tuned Masked Autoencoder Vision Trans for Potato Leaf Disease Classification**
 (09) Authors *MD Ilias Bappi, David J. Richter, Kyungbaek Kim*

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Parallel Sessions 4	
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 Time	December 20 Friday (13:00 ~ 14:20)
 Room	Hall 3, 2 nd Floor, IT Building
 Session Chair	Eunhui Kim, Korea Institute of Science and Technology Information
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<hr/>	01 (14)	Title	Potential of the Life Roadmap: A Visual Tool for Goal Achievement in Education, Career, and Community Development
		Authors	<i>Si-Cheon You</i>
<hr/>	02 (68)	Title	Study of Performance Between ZeroTier tunnel and Cloudflare WARP
		Authors	<i>Phouthong Sisavath, Senglathsamy Chanthamenavong, Phonepadith Phoummavong</i>
<hr/>	03 (80)	Title	A Novel Approach to Adapt Web Scraping for E-commerce Using Machine Learning, M. Priya
		Authors	<i>J. Raju, S. Thiruvenskadam, Young-Seok Lee, In-Ho Ra</i>
<hr/>	04 (10)	Title	The Role of Artificial Intelligence in Enhancing the Design Thinking Process
		Authors	<i>Eunkyong Baek</i>
<hr/>	05 (17)	Title	Key Information Processing Elements in the Sensory and Perceptual Stages during Dangerous Situations
		Authors	<i>Dasol Kim, Si-Cheon You</i>

Parallel Sessions 5

 Time	December 20 Friday (14:40 ~ 16:00)
 Room	Hall 3, 2 nd Floor, IT Building
 Session Chair	Myung Hwang Na, Chonnam National University

- | | |
|-------------------|---|
| 01
(73) | Title Establishing Optimal Cultivation Strategies for Field Crops Using Multispectral Vegetation Indices and Statistical Analysis Models

Authors <i>Jinho Kang, Zhuolin Liu, Myung Hwan Na</i> |
| 02
(03) | Title Group Activity Recognition in Indoor Spaces Using Point Clouds



Authors <i>Choi Jung-In</i> |
| 03
(35) | Title A Development of Open-Source Software-Based Online Judge System for Enhancing Programming Practice

Authors <i>Jaeho Kim, Minsu Kim, Jungeol Park, Jaebin Ahn, Sunghwan Jeon, Ayesha Akter Lata, Moonsoo Kang</i> |
| 04
(50) | Title Comparative Analysis of Kafka and RabbitMQ Accuracy in Real-Time Communication: A Case Study of the BCEL and Lao Securities Exchange

Authors <i>Adsavin THEPPHAKAN, Vimontha KHEOVONGPHACHANH, Khamphet BOUNNADY, Khanthanou LUANGXAYSANA, Phonexay VILAKONE, Xaythavy LOUANGVILAY, Phonepadith PHOUMMAVONG</i> |
| 05
(43) | Title Addressing Computational Challenges in Federated Medical Speech Recognition with DistilBERT




Authors <i>Sahil Mote, Shivani Kolekar, Kyungbaek Kim</i> |

Parallel Sessions 6

 Time	December 20 Friday (16:20 ~ 17:40)
 Room	Hall 3, 2 nd Floor, IT Building
 Session Chair	Rhee Chul, Ajou University

01 (15)	Title	Enhancing the Robustness of Federated Learning with Unified Defense Against Backdoor Attack
	Authors	<u>Seunghan Kim</u> , <u>Minyeong Choe</u> , <u>Hyunil Kim</u>
02 (19)	Title	Not Everyone Can Be Friends: Analysis of the Evolved Process of Cyber Romantic Scams and Defense Strategies
	Authors	<u>YoungJin Park</u> , <u>Juyoung Kang</u>
03 (42)	Title	Awareness of Cybersecurity Risks Among Smartphone Users: A Case of Tasmania Residence
	Authors	<u>Soonja Yeom</u> , <u>Israel Fianyi</u>
04 (07)	Title	Enhancing Gradient Inversion Attacks through Uniform Initialization
	Authors	<u>MinYeong Choe</u> , <u>Hyunil Kim</u>

Parallel Sessions 7

 Time	December 20 Friday (16:20 ~ 17:40)
 Room	Hall 3, 1 st Floor, IT Building
 Session Chair	Pankoo Kim, Chosun University

01 Title **Pepper Plant Disease Classification with ViT and Hybrid CNNs**
(11)

Authors *Alaya Parvin Alo*

02 Title **Research on Preventing Gradient Vanishing in Deep Learning Models**
(23)

Authors *Xinyao Wang*




03 Title **Real-time Action Recognition System in Childcare Center**
(40)

Authors *Chimin Oh*

04 Title **Development of a 3D webtoon background authoring tool to simplify webtoon background production**
(16)

Authors *HanByul Kang*




Poster Sessions 1

 Time	December 20 Friday (13:00 ~ 14:20)
 Room	Hall 3, 1 st Floor, IT Building
 Session Chair	Jingwang Koh, Sunchon National University

01 (51)	Title	Study the use of Redis and Memcached to improve the performance of data management in SQL Server database
	Authors	<u><i>Souphanith Khammanivong</i></u>
02 (52)	Title	Study the effectiveness of vulnerability scanning tools in web application development from cyber attacks
	Authors	<u><i>Kongmany Somsamone</i></u>
03 (62)	Title	Performance Comparison of FaceNet and ArcFace for Enhancing Customer Identification in Laos' Credit Information System
	Authors	<u><i>Dokkeo Keovongsa</i></u>
04 (63)	Title	A comparative study of the performance between the traditional Credit Scoring model and the updated model of the Credit Information Company of Lao PDR
	Authors	<u><i>Bounmy MIMALA</i></u>
05 (67)	Title	Comparative of effectiveness Go programming language and Perl programming language in Web Application
	Authors	<u><i>Khonesavanh KHOUNVISETH</i></u>
06 (76)	Title	An Enhanced Approach for Transmitting Kernel Changes to Profiling Tools in BMC
	Authors	<u><i>Hangyeol Kim</i></u>

07 (33)	Title	Enhancing Anomaly Detection in Smart Homes for Elderly Care: Transition from RF to UWB Sensors
	Authors	<i><u>Seri Park</u></i>
08 (48)	Title	The Study of IoT Sensors and Fuzzy Logic For Improving Landslide Warning Accuracy
	Authors	<i><u>Maleny Mounivong</u></i>
09 (49)	Title	Privacy-Protected Lonely Death Detection System Using Multiple mmWave Sensors
	Authors	<i><u>Su Kim</u></i>
10 (72)	Title	Survey on the Usage of IoT-Controlled Device in Vientiane Capital
	Authors	<i><u>Done Semounty</u></i>
11 (53)	Title	Wardriving Vientiane: Enhancing ICT Safety along Urban Tourist Routes
	Authors	<i><u>Soukphaxay SUNDALAVONG</u></i>
12 (61)	Title	PAICOM: A Card Game for Network and Cybersecurity Education
	Authors	<i><u>Phoutthanva NOKONGSIHEUANG</u></i>
13 (57)	Title	Verification of Measurement Accuracy of H-Beam Member Dimensions Using Image Post-Processing Algorithms
	Authors	<i><u>Jaehyouk CHOI</u></i>
14 (44)	Title	Real-time vibration monitoring system for pipe rack structures using IoT accelerometer sensors
	Authors	<i><u>Jaeyeong Yang</u></i>
15 (45)	Title	Damage detection of panel joints in steel structures Using digital optical fiber sensors
	Authors	<i><u>Jaeyeong Yang</u></i>
16 (45)	Title	Establishing a disaster management platform for facilities through the implementation of a 3-stage digital twin
	Authors	<i><u>Jin-Young Kwon</u></i>

Poster Sessions 2

 Time	December 20 Friday (14:40 ~ 16:00)
 Room	Hall 3, 1 st Floor, IT Building
 Session Chair	In-Ho Ra, Kunsan National University

01 (08)	Title	Designing Embedded Devices Capable of Developing Ensemble Learning Algorithms Without Manual Coding
	Authors	<u>Yoosoo Oh</u>
02 (13)	Title	Research on AI-Based MRV(Monitoring, Reporting, Verification) System for Daily Activity Assessment in Personal Carbon Harvest
	Authors	<u>Taeuk Chang</u>
03 (25)	Title	A Study on Advanced RAG-based SW Education System
	Authors	<u>JeongWoo An</u>
04 (54)	Title	Effectiveness Evaluation Between Logistic Regression and Random Forest in Customer Churn Prediction of TPLUS Digital Sole Company Limited
	Authors	<u>Sithong Phetvilai</u>
05 (58)	Title	Hierarchical Image Segmentation via Pixel Adjacency
	Authors	<u>Hyunji Lee</u>
06 (64)	Title	Analysis on Midpoint Estimation for Identity Loss Observation
	Authors	<u>Seangmin Lee</u>
07 (65)	Title	Improving Computational Efficiency in Video Analysis with Mamba-Based Architectures
	Authors	<u>Sehwan Heo</u>

08 (26)	Title	Strategic Utilization of Clinical & Omics Data Archive (CODA) for Omics Data Analysis: A System Perspective
	Authors	<u>Suehyun Lee</u>
09 (47)	Title	Semantic Network Analysis for Damage status Classification of Piperack Steel Structures
	Authors	<u>Jaehyounk CHOI</u>
10 (60)	Title	Study on Enhancing Performance in Data Analysis Using Data Mining
	Authors	<u>Bounthavy Chalernsouk</u>
11 (36)	Title	Motivational Elements of Participation in Gamification Educational Content Based on the Octalysis Framework
	Authors	<u>Ji-Ae Han</u>
12 (22)	Title	Regression Analysis for Agricultural Products Prediction and Different Crop Suggestions
	Authors	<u>Jin Gwang KOH</u>
13 (31)	Title	Design of an agricultural methane emission reduction system using a smart biofilter
	Authors	<u>Sangmin Lim</u>
14 (32)	Title	Design of crop harvest time prediction system using thermal imaging
	Authors	<u>Hyeono Choe</u>
15 (34)	Title	Study on a Data Collection Platform for Measuring Greenhouse Gas Emissions in Smart Livestock
	Authors	<u>Kwangho Yang</u>
16 (38)	Title	Design of Field Crop Disease and Pest Prediction System Using Artificial Intelligence
	Authors	<u>Gwang-Hoon Jung</u>
17 (56)	Title	Comparative Analysis of CNN and ResNet for Automated Tomato Grading
	Authors	<u>Jaeheon Kim</u>

SMA2024 Organizing Committee

General Chair

Si Cheon You, Chosun University, Republic of Korea

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Kwangmyung Oh, 2PM Lab Inc

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Inho Ra, Kunsan National University, Republic of Korea

Jungtaek Seo, Gachon University, Republic of Korea

Jinman Jung, Inha University, Republic of Korea

Junyoung Heo, Hansung University, Republic of Korea

Jiae Han, Chosun University, Republic of Korea

Tutorial Chairs

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Vimontha Khievongphachanh, National University of Laos, Lao PDR

Identity Design Chair

Bongshik Yun, NAMBU University, Republic of Korea

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Hong Min, Gachon University, Republic of Korea

SMA2024 International Liaison Committee

International Cooperation Chairs

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Kyungjin Cha, Hanyang University, Republic of Korea

Ming Wang, Modern Industrial School of Health Management, Jinzhou Medical University, China

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Phonexay Vilakone, National University of Laos, Lao PDR

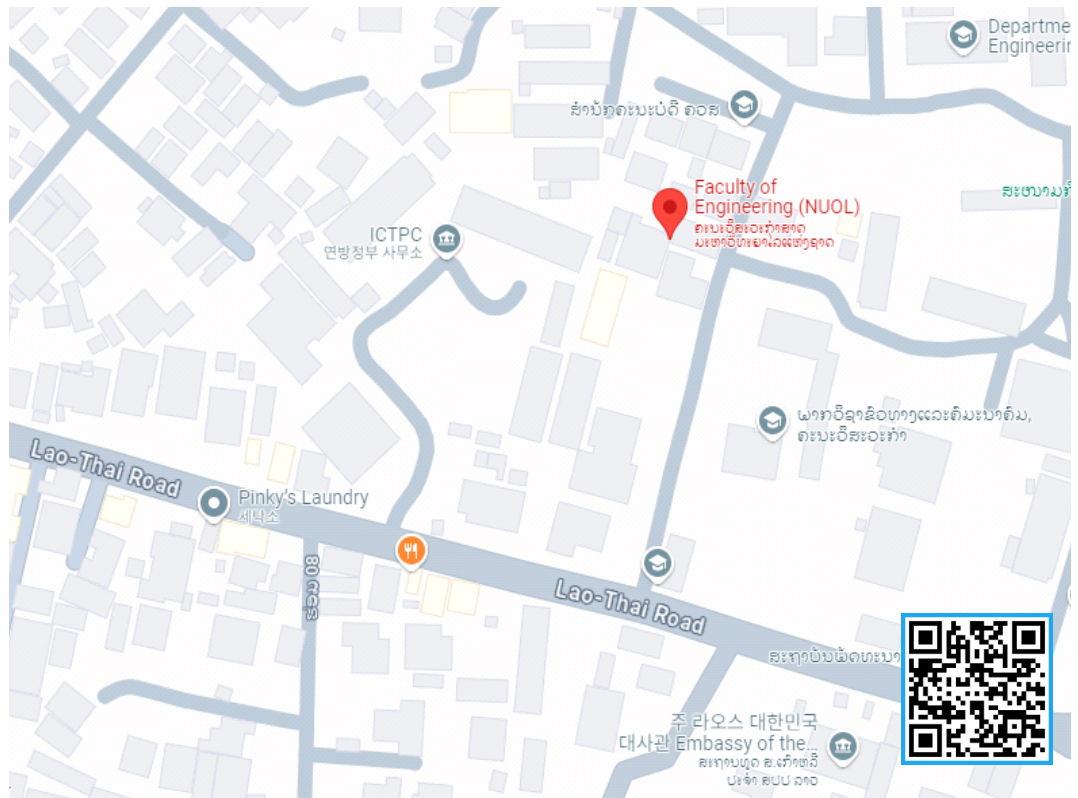
Venue

National University of Laos, Sokpaluang Campus, Vientiane, Laos

IT and EN Building, Department of Computer Engineering and
Information Technology, Faculty of Engineering

National University of Laos

(Sokpaluang Campus, Opposite of the Embassy of the Republic of Korea)



Sokpaluang Campus Entrance

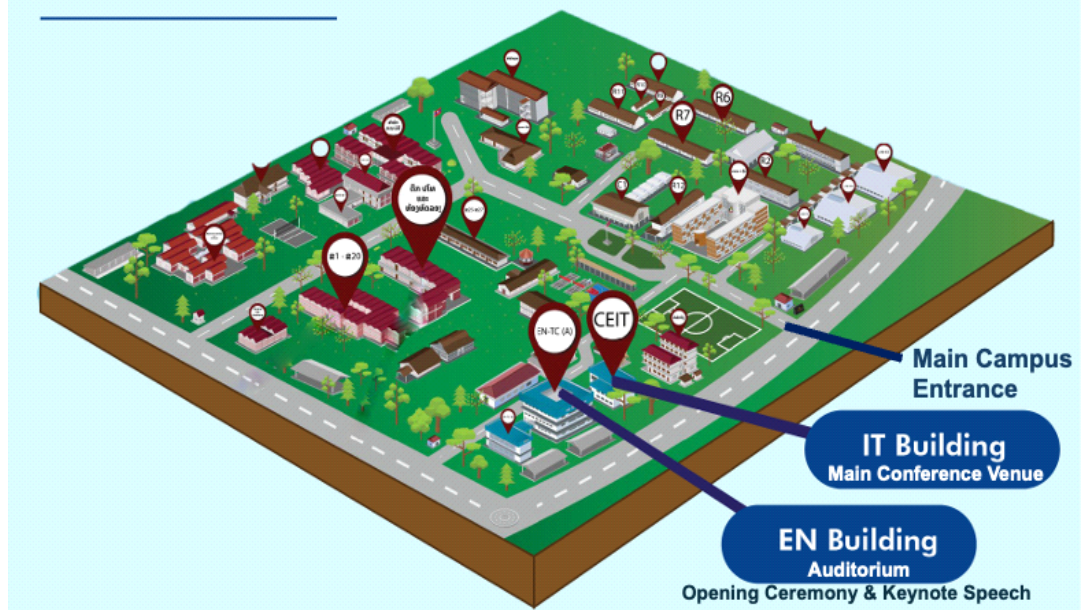


IT Building Entrance

Conference Theme

AI and Intelligent Systems: Shaping the Future of Social Humanity

Computer Engineering and Information Technology Department, Faculty of Engineering, National University of Laos (Sokpaluang Campus)

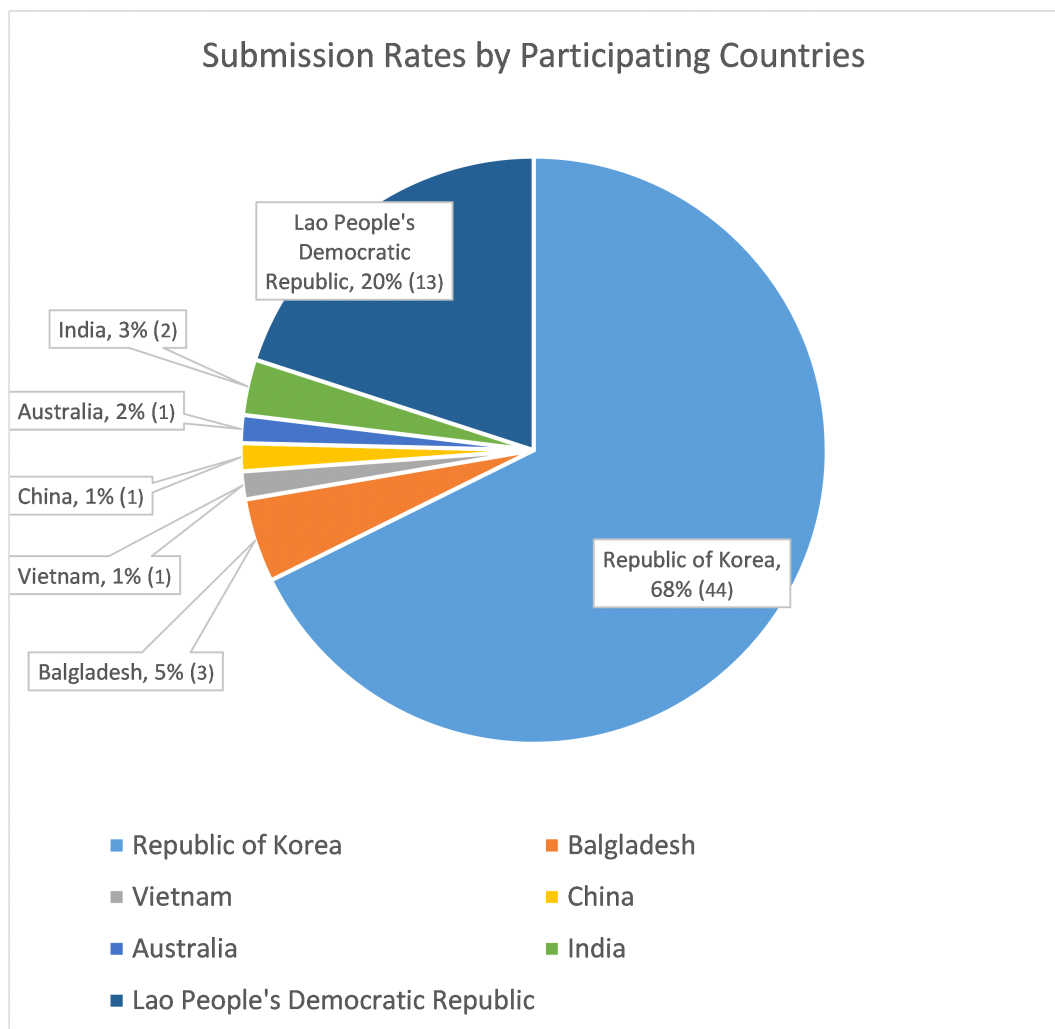


Address: IT and EN Building, Lao-Thai Friendship Road, Sokpaluang Village, Sisattanak District, Vientiane Capital, Lao PDR

Tel: +856 20 55 143 923

Submission Rates by Participating Countries

It is with great joy that we celebrate the successful hosting the 13th International Conference on Smart Media and Applications (SMA 2024). This year, we are honored to receive a total of 65 excellent research papers submitted by distinguished researchers from six countries: the Republic of Korea(67.7%), the Lao People's Democratic Republic(20.0%), Bangladesh(4.6%), India(3.1%), Australia(1.5%), and Vietnam(1.5%).



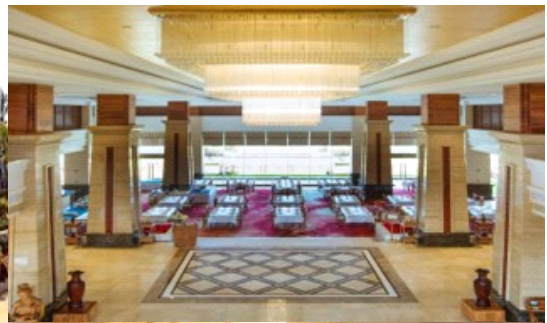
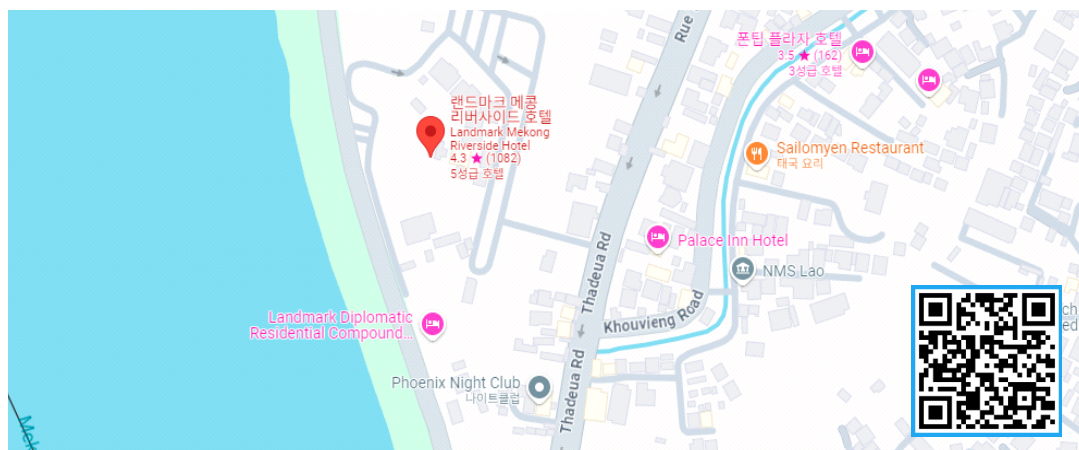
Conference Banquet

Landmark Mekong Riverside Hotel, Vientiane, Laos

The Conference Banquet will be held at the Landmark Mekong Riverside Hotel on the evening of December 20, 2024.

Diamond Hall, 4th Floor, Landmark Diplomatic Residential Compound within Landmark Mekong Riverside Hotel.

Address: WJR8+RRC Landmark Riverside Hotel, Vientiane, Laos





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