## ASEAN IVO Forum 2023
### Program

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker/Presenter</th>
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<tr>
<td>08:30</td>
<td>Registration</td>
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<tr>
<td>09:30</td>
<td>Opening Address</td>
<td>MC: Mr. Bounpaseuth Oupathana, National University of Laos (NUOL)</td>
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<td>Assoc. Prof Dr. Dexanoulath SEANDOUANGDETH</td>
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<td>Vice President of NUOL, Lao PDR</td>
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<td>Dr. YANO Hiroyuki</td>
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<td>Vice President</td>
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<td>NICT, Japan</td>
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<td>09:40</td>
<td>Welcome Remarks</td>
<td>H.E. Mr. KOBAYASHI Kenichi</td>
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<td>Ambassador of Japan to the Lao PDR</td>
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<td>Embassy of Japan in the Lao PDR</td>
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<td>Assoc.Prof. Dr. Lavanh Vongkhamhansane</td>
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<td>Act. Director General</td>
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<td>Higher Education Department, Ministry of Education and Sports, Lao PDR</td>
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<td>09:50</td>
<td>Invited Talk 1</td>
<td>Dr. Thavisak Manodham</td>
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<td>Director General</td>
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<td>Digital Government Center, Ministry of Technology and Communications, Lao PDR</td>
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<td>10:10</td>
<td>Invited Talk 2</td>
<td>Mr. Maaly Vorlabouth</td>
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<td>Deputy Director General of Department of Planning,</td>
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<td>Director of Education and Sports Statistics Center,</td>
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<td>Ministry of Education and Sports, Lao PDR</td>
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<td>10:30</td>
<td>Group photo</td>
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<td>10:35</td>
<td>Break</td>
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**Oral Session**


10:50 Session 1: ICT for food 1
Chair: Dr. Francois Chin Po Shin, I²R, Singapore

Exploring Edible Insects: A Nutritional and Technological Frontier for Sustainable Food Solutions
Eng-Tong Phuah
Universiti Teknologi Brunei, Brunei

HAB-ASEAN: Harmful Algal Bloom (HAB) Remote-Monitoring and Detection over Wireless Networks for Food Security in ASEAN
Aduwati Sali, Nadiah Zainol Abidin, Syamsiah Mashohor, Alyani Ismail, Natrah Mohd Ikhsan, Ahmed Fikri Abdullah
Universiti Putra Malaysia (UPM), Malaysia

11:30 Session 2: ICT for food 2
Chair: Dr. Cheab Sovuthy, CADT, Cambodia

An AI-based Crop Recommendation System through Disease Detection
Rottana Ly
Cambodia Academy of Digital Technology, Cambodia

Forward sale using product traceability software and digital marketing – A case study of mango in Dong Thap Province, Vietnam
My-Phuong Nguyen-Hoang
Dong Thap Library, Vietnam

12:10 Lunch

13:00 Session 3: ICT for food 3
Chair: Dr. Dk Hayati PHM Yassin, UBD, Brunei

Intelligent-Control System for Agricultural Production under a Greenhouse (I-CAP)
Phon Sovatna
Institute of Agriculture (NIA), Cambodia

Hybrid Machine Learning and Statistical Modeling: an alternative and cost-effective approach for food product formulations to combat malnutrition
Syazana Abdullah Lim,
Universiti Teknologi Brunei, Brunei

13:40 Session 4: ICT for Environment Protection and Disaster Prevention
Chair: Mrs. Woroindah Widiastuti, MCIT, Indonesia

Fast and Smart Disaster Recovery Networks Using 5G-Advanced and 6G Mobile Base Stations with Physical Layer Artificial Intelligence and Quantum Machine Learning
Khoirul Anwar, Gelar Budiman, Dick Maryopi
Telkom University, Indonesia
Unsupervised crack segmentation and detection using graph neural network clustering for disaster level evaluation
Wuttipong Kumwilaisak, Hein Thura Aung, Krishadawut Monnikhof
King Mongkut's University of Technology Thonburi, Thailand, Thailand

14:20
Session 5: ICT for Health and Welfare
Chair: Dr. Kanokvate Tungpimolrut, NECTEC, Thailand

Mortality Rate and Length of Stay Prediction with Machine Learning for Resource Management in Pediatric Intensive Care Unit
Kritsaporn Sujjavorakul, Wuttipong Kumwilaisak, Namtip Buranaburustam, Sahawat Tanutsiriteeradet, Sirorat Kaewwongdee, Thanaporn Pancharoen
1 King Chulalongkorn Memorial Hospital, Thailand
2 King Mongkut's University of Technology Thonburi, Thailand
Towards a timely and accurate AI-based Computer-Aided Diagnosis approach in healthcare
Quang-Vu Nguyen, Vu-Thu-Nguyet Pham
Vietnam-Korea University of Information and Communication Technology, Vietnam

15:00
Break

15:20
Session 6: ICT for Secure and Smart Community 1
Chair: Prof. Dr. Khin Mar Soe, UCSY, Myanmar

Smart, Secured, Survivable and Sustainable Agriculture Platform Project Using Solar Energy, IoT, AI and Blockchain Technology
Tin Thein Thwel, Win Lelt Lelt Phyu, Ahnge Htwe, Myat Min Khant, May Theingi Kyaw, May Thu Kyaw
University of Computer Studies, Yangon, Myanmar

ECD-DSPA: Estimating Crowd Density to Detect Sparse Areas to Aid in Crowd Management Using YOLOv8
Rhodessa Cascaro, Janelle Cassandra Uy, John Francis Puebla, Ian Miguel Lancia
Mapua Malayan Colleges Mindanao, The Philippines

16:00
Session 7: ICT for Secure and Smart Community 2
Chair: Prof. Dr. Shamsul Bin Sahibuddin, UTM, Malaysia

MUST-CARE: Smart Waste Sorting Machine based on IOT and Machine Learning Approaches
Sari Dewi Budiwati, Suryatiningsih, Rio Korio Utoro, Yahdi Siradj, Bethani Suryawardani, Amalia Audah, Khoirul Anwar
Telkom University, Indonesia

A Robust Cloud-based Machine Learning and AI Platform for Low-cost and Intelligent Decentralised Wastewater Monitoring System for Remote Communities in Low Income Countries
Lillian Yee Kiaw Wang, Phaik Eong Poh
Monash University Malaysia, Malaysia
16:40  Session 8: ICT for Advanced Technologies and Applications
Chair: Dr. Franz A. de Leon, DOST-ASTI, The Philippines

LokaLTE: A Case Study of Using LTE Community Cellular Network to Enhance Digital Learning in The Philippines
Riza Carmela Marron Pineda, Philip Martinez, Jerome Dylan Villamater, Kenneth Rey Sumalinog, Jethro Betsayda, Ramon Vann Cleff Raro
Advanced Science and Technology Institute (DOST-ASTI), The Philippines

Multilingual Speech Dataset for ASEAN Languages
Hay Mar Soe Naing, Win Pa Pa
University of Computer Studies, Yangon, Myanmar

17:20  Closing Address

Mr. YAMAGUCHI Norifumi
Executive Director, Global Alliance Department, NICT, Japan

Prof. Dr. Houngphet Chanthavong
Vice President of NUOL, Lao PDR

Poster session

Time:  08:30 – 17:30
Venue:  Vientiane Grand Ballroom, Lao Plaza Hotel, Vientiane, Lao PDR

1.  A Point to Point Microwave Link with Its Solar Power System
   Wai Phyo Aung
   Technological University (Hmawbi), Yangon, Myanmar

2.  Scattered Data Interpolation Using Rational Spline to Visualize Energy Computing(tentative)
   Samsul Ariffin Abdul Karim
   Universiti Malaysia Sabah, Malaysia

3.  DurTect: An Image-Based Detection using Roboflow Framework and YOLOv5 Model for Disease Identification in Patch Canker on Durian(tentative)
   Martzel Pelicano Baste
   Mapua Malayan Colleges Mindanao, The Philippines

4.  Salu-Salo: A VR Cooking Game Simulating the Making of Filipino Cuisines
   Cherry B. Lisondra
   Mapua Malayan Colleges Mindanao, The Philippines