

## The 3rd International Symposium on Asia AI : AI for Life during & after COVID-19 (A Report on Symposium Hosting)

メタデータ	言語: English 出版者: 武蔵野大学アジアAI研究所 公開日: 2022-03-28 キーワード: 作成者: Charoenporn, Thatsanee, Sornlertlamvanich, Virach メールアドレス: 所属:
URL	<a href="https://mu.repo.nii.ac.jp/records/1774">https://mu.repo.nii.ac.jp/records/1774</a>

The 3<sup>rd</sup> International Symposium on Asia AI  
-AI for Life during & after COVID-19-  
(A Report on Symposium Hosting)

Thatsanee Charoenporn  
Virach Sornlertlamvanich

### Overview

Asia AI Institute, Faculty of Data Science, Musashino University together with their alliance, realize the importance and the necessity of AI manpower and advanced research development, we therefore held the 3<sup>rd</sup> International Symposium on Asia AI: AI for Life during & after COVID-19 virtually via ZOOM meeting, on November 17, 2021, from 09:30-17:30. The symposium was also held together with 6-day training program for Thammasat University' s students.

## 1. Introduction

AI in the promising deep learning aspect has been groomed to the level of industrial and business acceptance. Many applied areas have been found in using AI to gain their potential of improvement. While the significant advancement of AI, many industries and businesses are looking for the potential workforce and collaboration to fulfill their needs.

Asia AI Institute, Faculty of Data Science, Musashino University together with their alliance, realize the importance and the necessity of AI manpower and advanced research development, we therefore held the 3<sup>rd</sup> International Symposium on Asia AI: AI for Life during & after COVID-19 virtually via ZOOM meeting, on November 17, 2021, from 09:30-17:30. The alliance supported the 3<sup>rd</sup> International Symposium on Asia AI include AOTS, AMEICC, METI, and Keio University of Japan as well as Thammasat School of Engineering, SIIT, and RUN of Thailand as shown in Figure 1.

## 2. Objectives

The main objectives of the symposium and its related activities are as follow.

- To transfer AI related knowledge from advanced Japanese organization to Thai academic society.

- To transfer AI related knowledge, skills and attitudes to increase economic competitiveness of Thai society.
- To establish the close cooperation between Japanese industries and academia.
- To initiate the cooperation between Japanese AI leading organization and Thai academia.
- To increase the motivation of students in learning advance knowledge.
- To encourage students to have AI technical skills which is aligned to the need of real business and industry.



Figure 1 The supporters of the 3<sup>rd</sup> International Symposium on Asia AI

### 3. The Program of the Symposium

We were honored by the expert speakers to present interesting and useful topics for the participants including students, representatives from both governmental and private sectors.

The whole day symposium consisted of opening session and invited 4 sessions as followings.

#### a) Opening Session

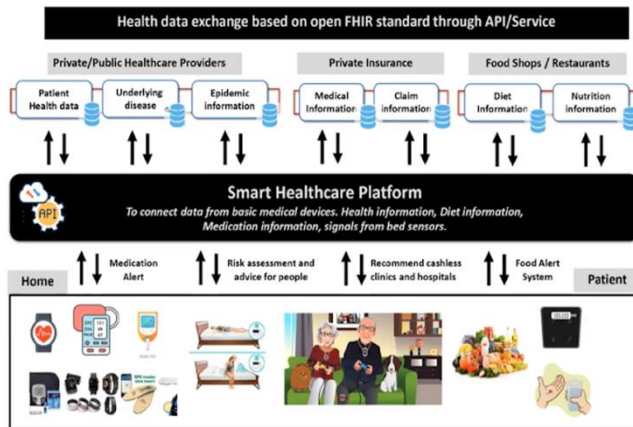
Moderated by

- Prof. Dr. Yasushi Kiyoki, AAIL, Faculty of Data Science, Musashino University, and Keio University
- Prof. Dr. Virach Sornlertlamvanich, AAIL, Faculty of Data Science, Musashino University

## AI for Industrial



Opening and Welcome Speech  
by Assoc. Prof. Dr. Thira  
Jearsiripongkul  
*Dean of Faculty of  
Engineering, Thammasat  
University*

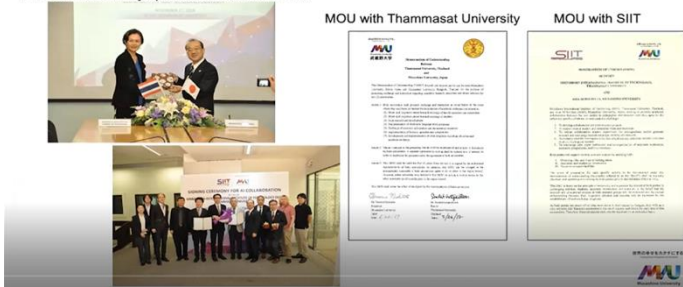


Thammasat AI Initiative  
by Prof. Dr. Siriwan  
Suebnukarn  
*Vice Rector for Research and  
Innovation, Thammasat  
University*

## Acknowledgement

- I would like to express my appreciation for,
  - Assoc. Prof. Dr. Thira Jearsiripongkul (Dean of Faculty of Engineering, Thammasat University)
  - Prof. Dr. Siriwan Suebnukarn (Vice Rector for Research and Innovation, Thammasat University)
- I also would like to express my appreciation for the MOU signed with Thammasat University/SIIT and the strong collaboration with your university for our research activities.

First International Symposium on Asia AI in 2018



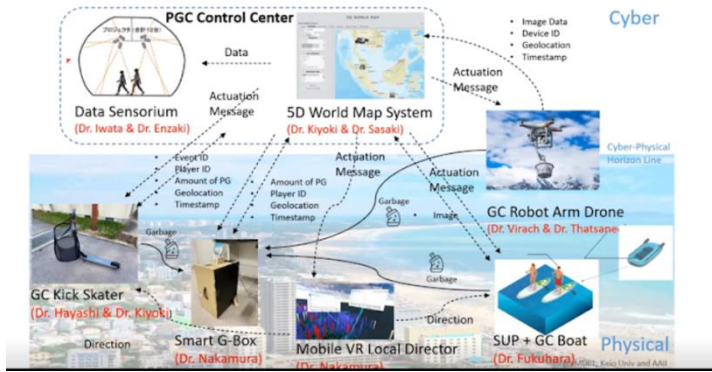
International & Collaborative  
AI Research for World  
Happiness: A Message to You  
towards 2050

by Prof. Dr. Teruma Nishimoto  
*President of Musashino  
University*

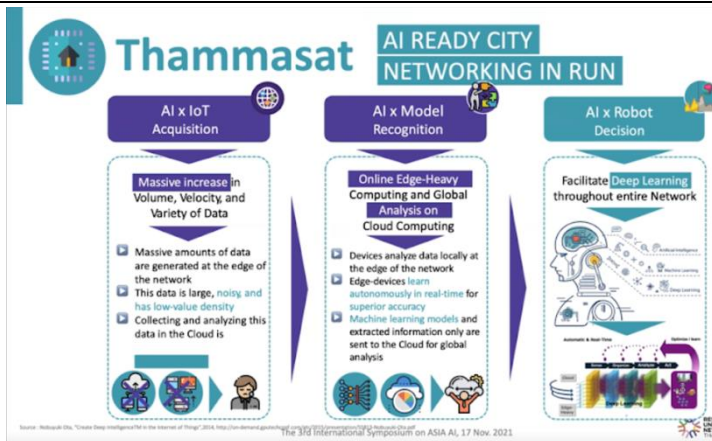
b) Session 2: 5DWM-UNESCAP, AI City, and Active Senior

Moderated by Dr. Somrudee Deepaisarn, Sirindhorn International Institute of Technology.

### Future Direction of PGC Control Center with SPA-based Meta-Level AI Architecture



**5D-World Map System: Global DB & AI System Realizing Semantic Interpretations for Environment and Society**  
 by Prof. Dr. Yasushi Kiyoki,  
*AII, Musashino University, Keio University*



**AI Ready City**  
 by Prof. Dr. Virach Sornlertlamvanich  
*AII, Musashino University, Thammasat University*

## Project Moving Retirees Forward:

Reskill & Upskill to Enhance Job Prospects in the New Economy



### Purpose of Ready Senior



AI for Ageing Society

by Asst. Prof. Dr. Duangjai

Lorthanavanich

*Ageing Business & Care*

*Development Centre, Thammasat*

*University*

## Stroke Screening

- Microembolus Detection  
TCD (IEEE Access '18; EMBC '16, '17)
- Face Arm Speech Time (FAST) Screening (IEEE Access '20; EMBC '19)

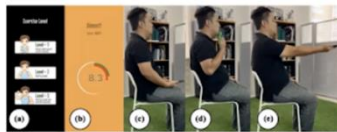


Fig. 1. A screenshot of our mobile application: (a) exercise level selection screen, (b) the Raise Up exercise page, (c) the subject in the prepare, (d) Curl Up, and (e) Raise Up positions.



AI-assisted Disease Screening  
in Low-resource Settings

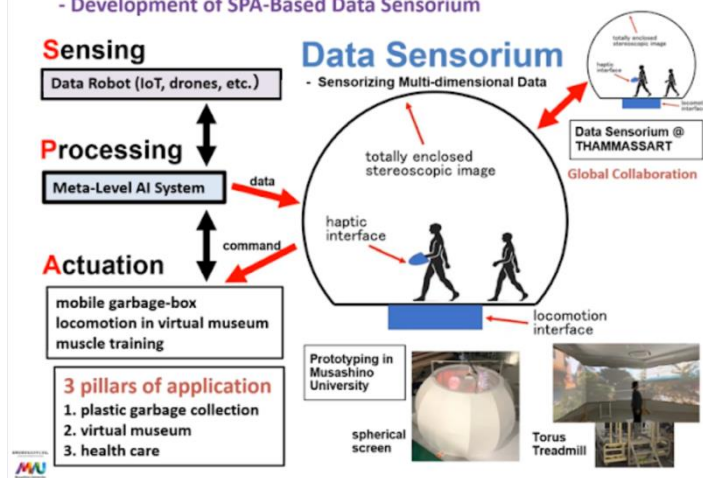
by Assoc. Prof. Dr.

Charturong Tantibundhit

*Faculty of Engineering,*

*Thammasat University*

## Project 1 : AI Campus & City with Meta-Level AI System - Development of SPA-Based Data Sensorium



Data Sensorium for Human  
Empowerment

by Prof. Dr. Hiroo Iwata

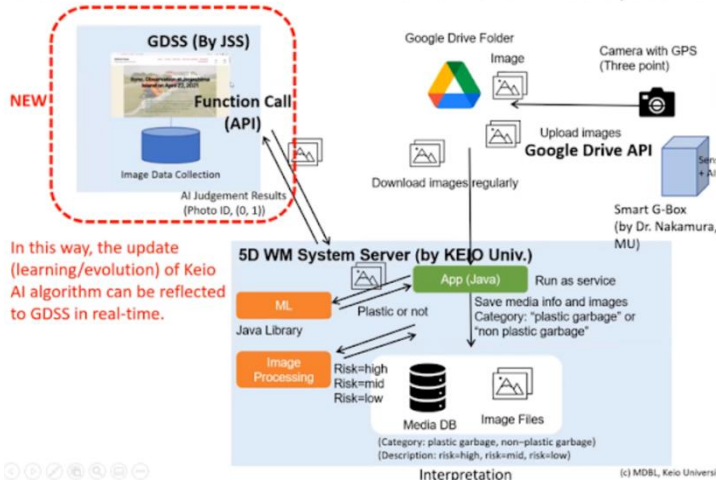
*AAIL, Musashino University,*

*University of Tsukuba*

c) Session 3: AI for SDGs Initiatives

Moderated by Assoc. Prof. Dr. Pawinee Iamtrakul, Thammasat University

**Integration**  
between "KEIO AI & 5D WM" and other Web systems

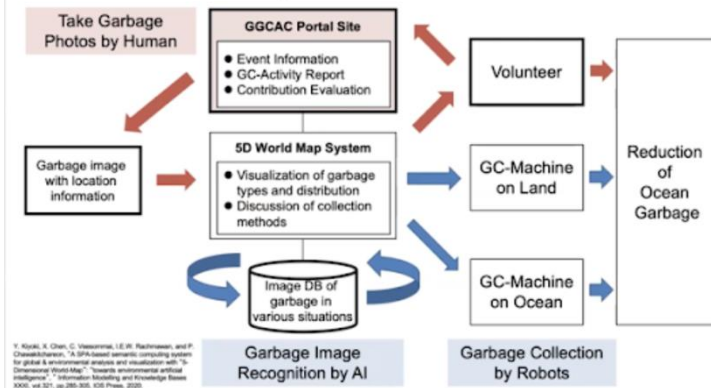


Plastic Garbage Reduction  
with 5D World Map System and  
GGCAC (Global Garbage  
Collection Activity  
Competition)



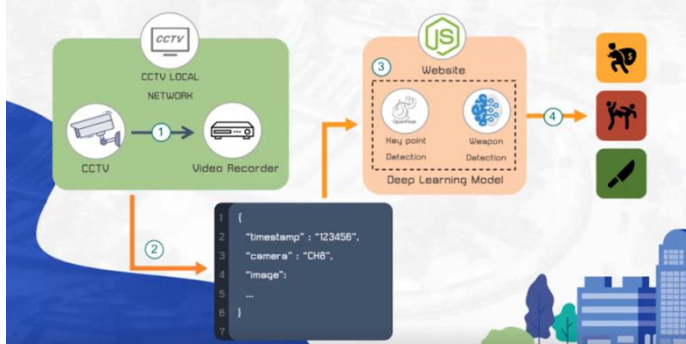
by Assoc. Prof. Dr. Shiori  
Sasaki and

**Two Cycles in GGCAC**



Assoc. Prof. Dr. Yasuhiro  
Hayashi,  
AIII, Musashino University

Smart-city-surveillance (Software)



Human Behavioral Analysis  
for Security Purpose in AI  
City

by Assoc. Prof. Dr. Narit  
Hnoohom, Mahidol University



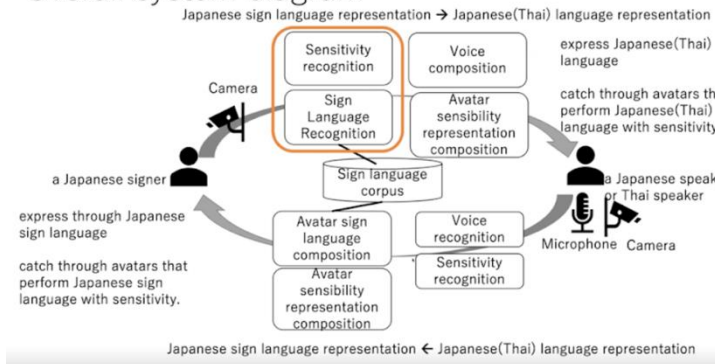
Innovation for Zero Waste Society Incorporate with Thammasat SDGs Initiative by Asst. Prof. Dr. Prinya Thaewanarumitkul  
*Chairman of Puey Park for Sustainability, Manager of Thammasat Field Hospital and Vaccination Center, Thammasat University*

d) Session 4: AI for Enhancing Human Communication

Moderated by

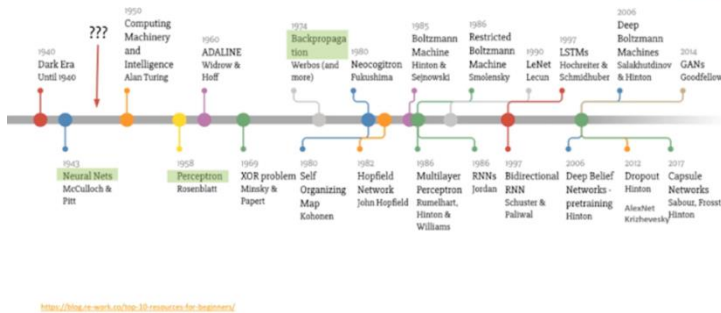
- Prof. Dr. Thatsanee Charoenporn, AAIL, Faculty of Data Science, Musashino University
- Dr. Konlakorn Wongpatik, Mahidol University

Overall system diagram



Media Transformation on Social Distancing Community by Prof. Dr. Takafumi Nakanishi  
*AAIL, Musashino University*

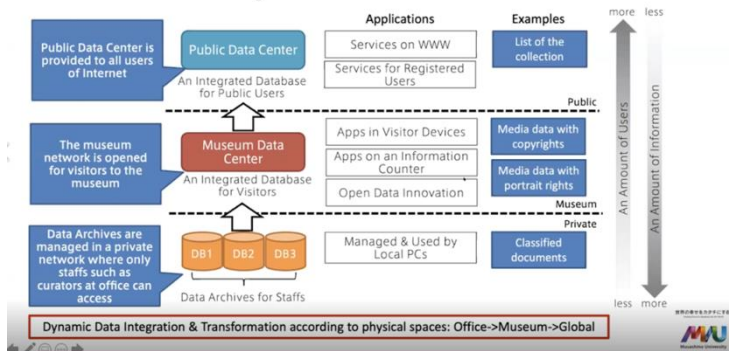
## History of Deep Learning



## Evolution of Deep Learning in Today AI Business

by Mr. Jarun Ngamvirojcharoen  
*Director (CEO Office) of TILDI (Technology Innovation Lab & Decision Intelligence), Carabao Group*

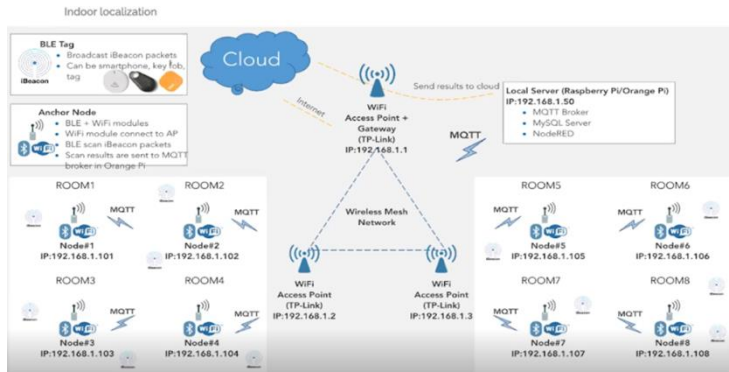
## Concept of Artizon Cloud



## Cyber-Physical Space Creation for Culture Connectivity

by Prof. Dr. Naoki Ishibashi  
*AII, Musashino University*

## Smart Indoor Environment



## Indoor Positioning for Seamless Human Traceability

by Asst. Prof. Dr. Teerayuth Horanont  
*SIIT, Thammasat University*

e) Session 5: Collaborative Implementation in 2022 toward Global & Environment AI  
Moderated by Prof. Dr. Virach Sornlertlamvanich, AAIL, Faculty of Data Science,  
Musashino University

In this session, there are 7 demonstrations on ongoing research projects and implementation for further collaboration as follows.

**1) DP3D & 5D-DP3D-Data Sensorium Integration**

by Assoc. Prof. Dr. Ryota Nakamura and Assoc. Prof. Dr. Shiori Sasaki, *AAIL, Faculty of Data Science, Musashino University*

**2) Data Sensorium Interaction by Two Spaces**

by Dr. Yuki Enzaki, *AAIL, Faculty of Data Science, Musashino University*

**3) Artizon Virtual Museum in Data Sensorium**

by Prof. Dr. Naoki Ishibashi, *AAIL, Faculty of Data Science, Musashino University*

**4) Development of a Garbage Collection Support System on the Water Using an Automatic Tracking Garbage Carrier Boat**

by Assoc. Prof. Dr. Yoshihisa Fukuhara, *AAIL, Faculty of Data Science, Musashino University*

**5) Development of An Integrated Garbage Collection Support Tool Using Kick Scooter at Seashore**

by Assoc. Prof. Dr. Yasuhiro Hayashi, *AAIL, Faculty of Data Science, Musashino University*

**6) E-Money on Campus Enhanced by Blockchain**

by Asst. Prof. Dr. Warodom Werapun and Asst. Prof. Dr. Nattapong Tongtep, *College of Computing, Prince of Songkla University Phuket Campus*

**7) The 3D Model of AI City @ Thammasat University, Rangsit Campus**

by Assist Prof. Chawee Busayarat, *Faculty of Architecture and Planning, Thammasat University*





#### 4. The Symposium Participation

There are 98 users to participate the symposium from academic institutes, private sectors, government organizations and etc., as illustrated in these following figures.

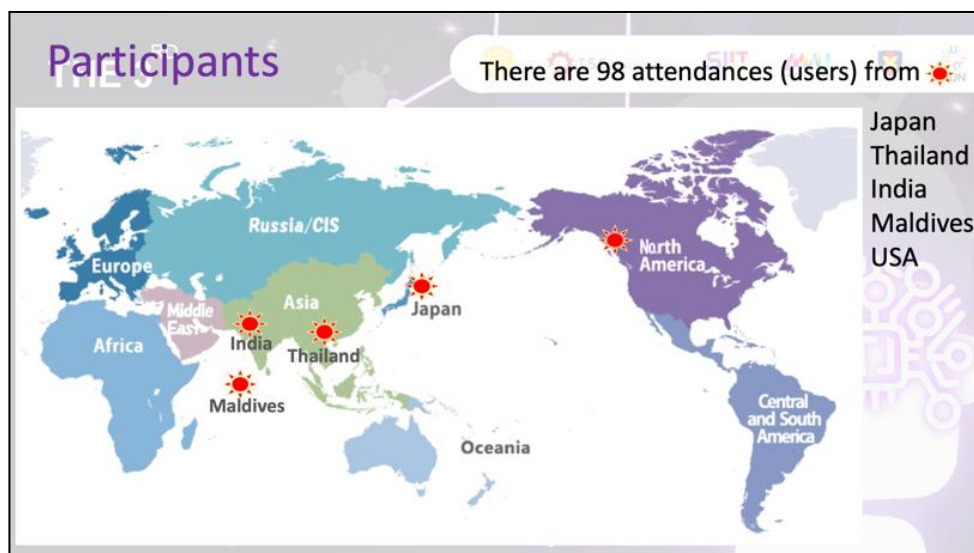


Figure 2 Participants of the 3<sup>rd</sup> AAIL Symposium by regions

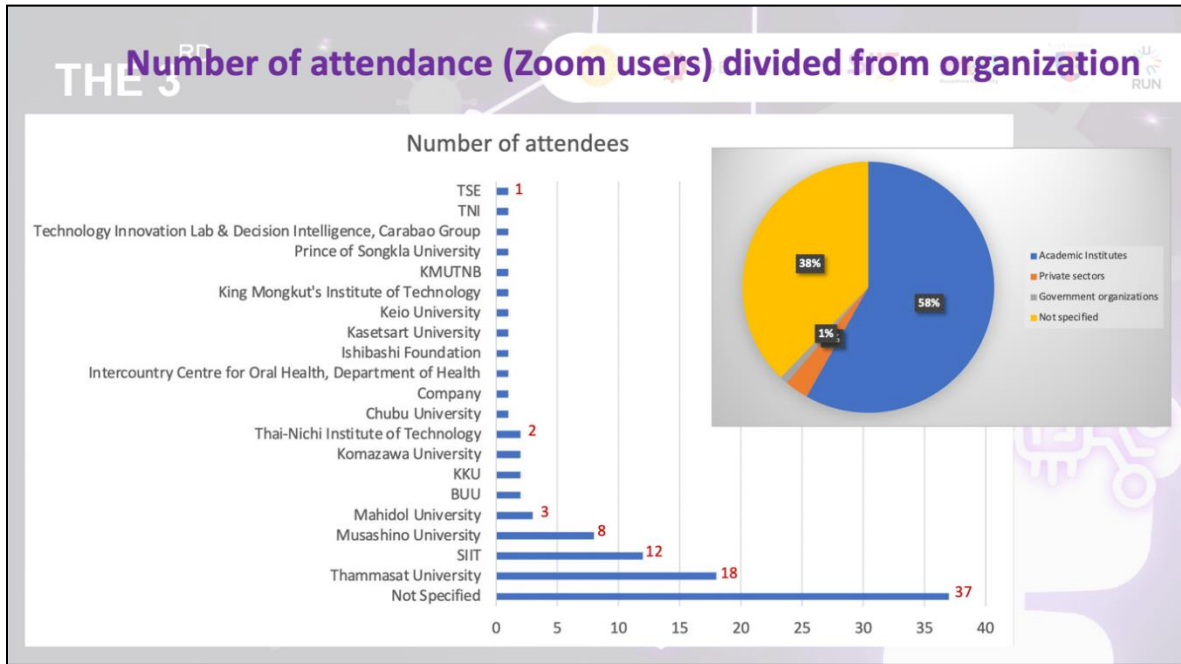


Figure 3 Number of ZOOM users by organization

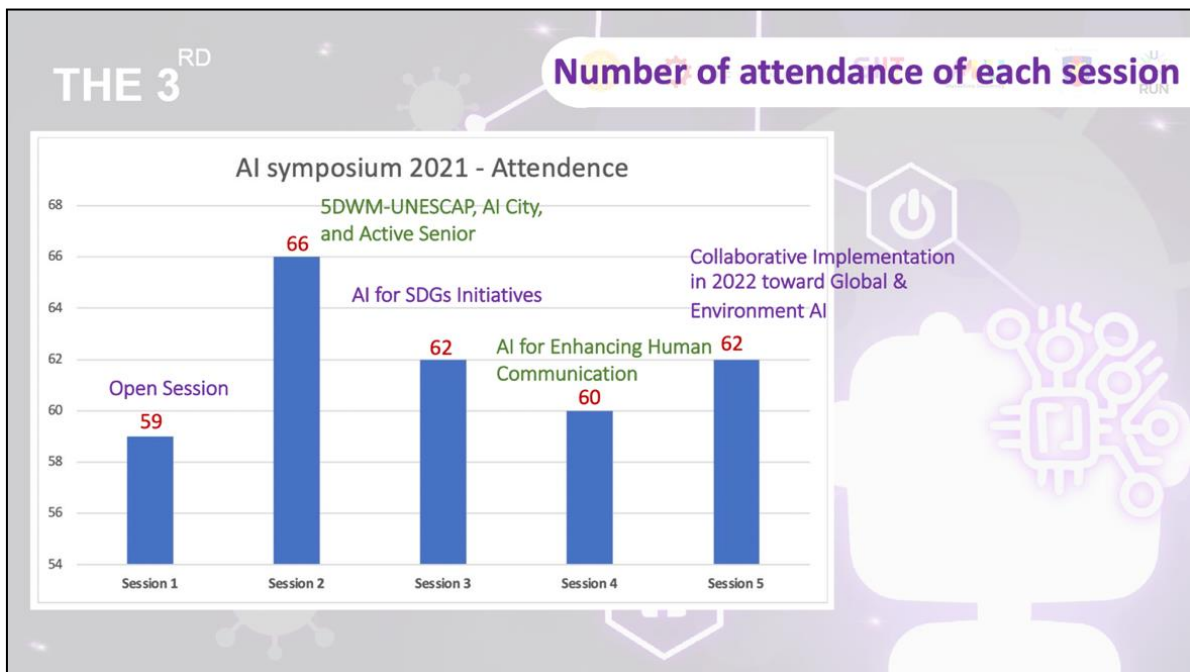


Figure 4 Number of attendances by session

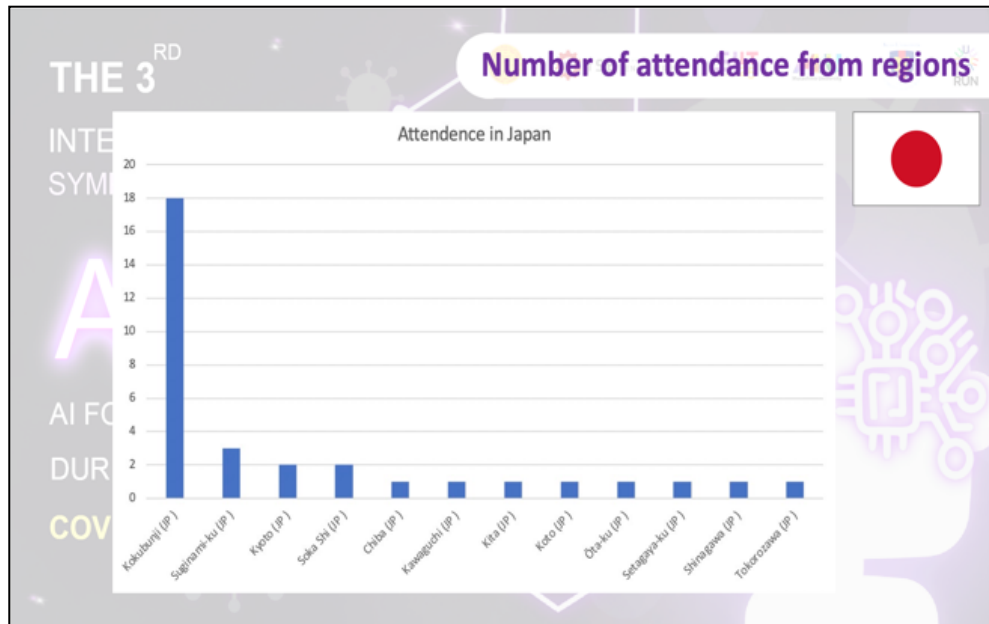


Figure 5 Number of attendances from Japan

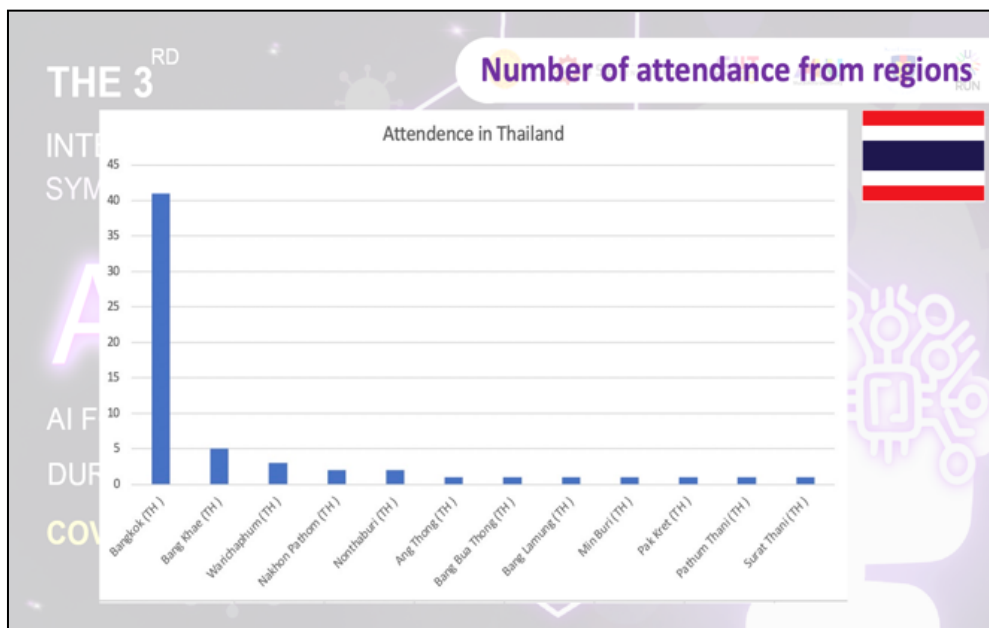


Figure 6 Number of attendances from Thailand

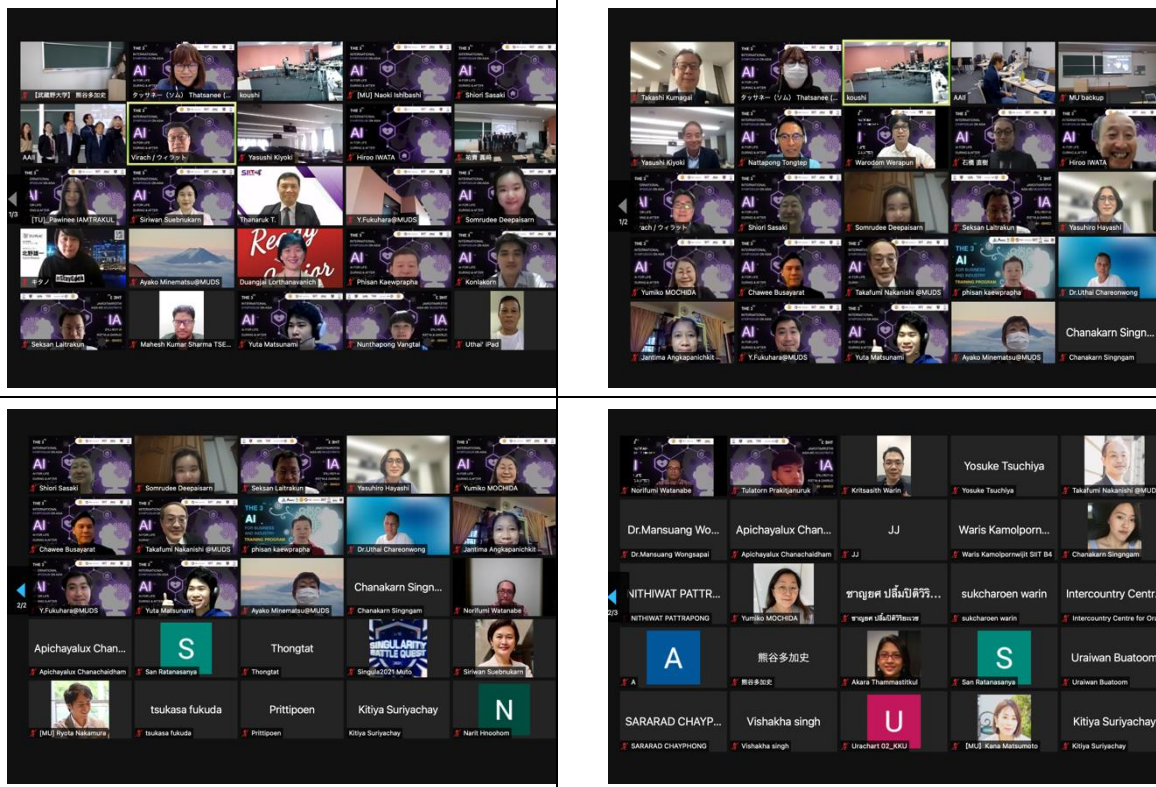


Figure 7 Participants of the 3<sup>rd</sup> International Symposium on Asia AI on ZOOM

**5. AI for Business and Industry Training Program**

Faculty of Engineering, and SIIT of Thammasat University, Asia AI Institute (AAII), Faculty of Data Science of Musashino University and AOTS/AMEICC (Japan) who is the main supporter are aware of the current growth of the needs in AI personnel and the importance of the collaboration among education, business and government sectors. So we design a program to encourage students to experience the advanced AI technical practice in the real business and industrial sectors.

The 6-day training program aiming at the establishment of “AI Workforce as a New Strategic Arm for Business and Industry”, therefore, had been organized during November 15-20, 2021. The course was held at 17:00 - 20:00 on weekdays and at 9:00 - 12:00 on weekend online via ZOOM meeting.

Along the program, there are 61 students from variety of majors and studying fields of Sirindhorn Institution of Technology (SIIT), Faculty of Engineering (TU), and other institutes attending and interested in this training program. And it is reported that the number of students attending the program is more than the last year. Figure 8 shows the percentage of students from different faculty/institute, and Figure 9 are the screenshot of students on ZOOM.

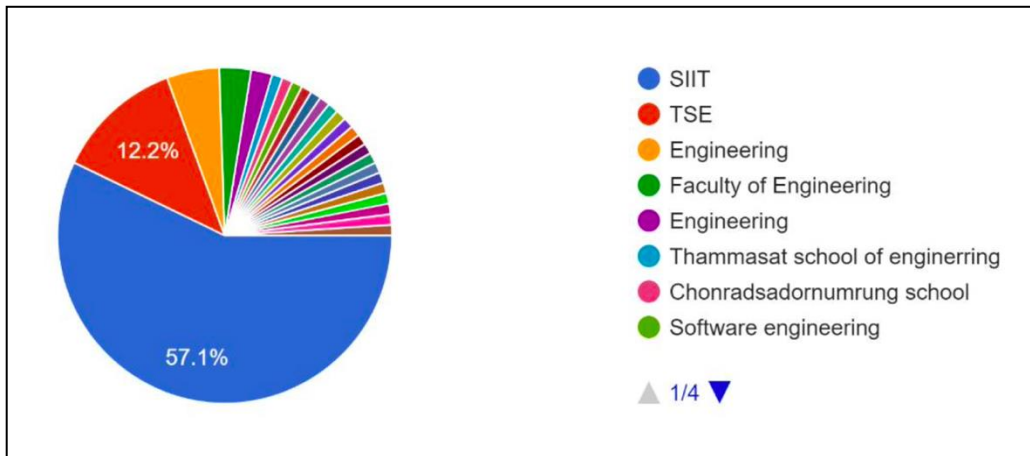


Figure 8 the percentage of students from different faculty/institute

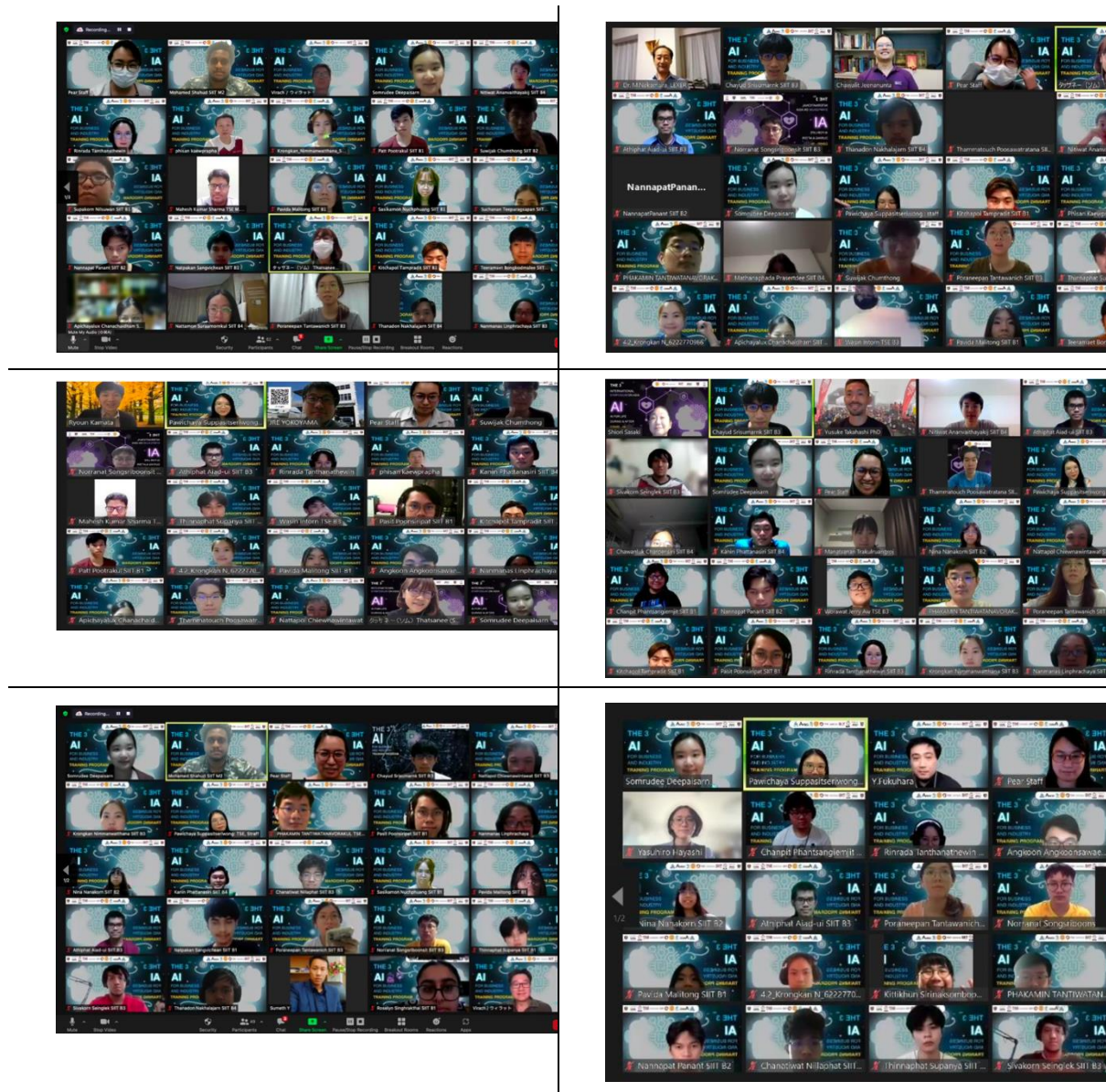


Figure 9 Screenshots of student on ZOOM.

## 6. Conclusion

The Asia AI Symposium is hosted by Asia AI Institute, Faculty of Data Science, Musashino University with the support of AOTS, AMEICC, METI, and Keio University of Japan, and Thammasat School of Engineering, SIIT, and Research University Network of Thailand. As last year, the symposium is held on concurrence with the AMEICC endowed 6 days AI course for students of Thammasat University' s students. From the symposium, ongoing research projects and implementation of AAI and their alliance were presented. Collaboration among audience and AAI are our main objectives and the symposium was close with a very great fruitful discussion and success.

We are looking forward to presentations, participants and support in the next AAI Symposium and AI training which plan to take place in Thailand on November 2022.