





# **Final Program**

# The 3rd ACIS International Symposium on Emotional Artificial Intelligence & Metaverse (EAIM 2025)



June 25-27, 2025 Paradise Hotel Busan, Haeundae Beach, Busan, Republic of Korea

Sponsored by: International Association for Computer & Information Science (ACIS)

> In cooperation with: Korea Bigdata Society and Goodmorning Information Technology Co., Ltd

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Ms. SooHyeon Cho, Director, Korea Bigdata Society, Republic of Korea Ms. Seonah Won, Manager, Korea Bigdata Society, Republic of Korea

## **Program at a Glance**

## Wednesday, June 25, 2025

Time	Activity	Location
7:00 - 9:00	Registration	Foyer
9:00 - 9:20	Opening Ceremony	Capri Room
9:20 - 10:10	Keynote 1	Capri Room
10:10 - 10:30	Coffee Break	Foyer
10:30 - 11:20	Keynote 2	Capri Room
11:20 - 12:10	Panel Discussion	Sydney Room
12:10 - 13:10	Lunch on your own	
13:30 - 14:45	EAIM Session 1	Sydney Room C
14:45 - 15:00	Coffee Break	Foyer
15:00 - 16:15	EAIM Session 2	Sydney Room C
16:15 - 16:30	Coffee Break	Foyer
16:30 - 17:30	EAIM Session 3	Sydney Room C
18:00 - 19:30	Dinner Banquet & Award Ceremony	Capri Room

## **Program at a Glance**

## Thursday, June 26, 2025

Time	Activity	Location
7:00 – 9:00	Registration	Foyer
08:00 - 09:00	EAIM Session 4	Sydney Room C
09:00 - 09:15	Coffee Break	Foyer
09:15 - 10:30	EAIM Session 5	Sydney Room C
10:45 - 12:00	EAIM Session 6	Sydney Room C
12:20 - 13:30	Luncheon (Complimentary)	Sicily Room
13:30 - 15:00	EAIM Session 7	Sydney Room C
15:00 - 15:10	Coffee Break	Foyer
15:10 - 16:40	EAIM Session 8	Sydney Room C
16:40 - 16:50	Coffee Break	Foyer
16:50 - 17:35	EAIM Session 9	Sydney Room C

#### Keynote 1

### **Cyber-Physical Event Business Systems**

#### Tokuro Matsuo, Ph.D.

#### Professor, Advanced Institute of Industrial Technology, Japan

#### Abstract

Nowadays, a lot of types of communication system to make consensus among people are provided. We can utilize these kinds of systems, such as Social network system, e-mail, and instant messenger system, to make a decision and determination through online discussion. In the next decade, we can forecast a lot of types of consensus formation systems are provided and we may find new communication systems integrating between cyber and physical environment. In this talk, I introduce our conducted experiments using cyber-physical discussion environment in the panel discussion session in the conference. In the session, facilitator asks question to panelists about issues on the discussion and attendees can also do as well by their voice. Each attendee also can post and declare his/her opinions and suggestions through the online discussion system during the session. One or two facilitators facilitate the discussion in the online system as well as real discussion. We found out a lot of interesting results of attendees by the digital signage system in the conference venue. This digital signage system is connected to the attendees location capture system and conference registration system. These integrations between cyber and physical environments and data enable to make better consensus formation between all sorts of people.

#### Biography

Dr. Tokuro Matsuo is currently Full Professor at Advanced Institute of Industrial Technology (AIIT) in Tokyo Public University Corporation from 2012. Also, he is currently Visiting Professor at Sam Houston State University, USA; Director of Research Center for Artificial Intelligence and Service Science at AIIT; Executive Director of International Institute of Applied Informatics (IIAI); Executive Director of International Accreditation Association for Higher Education; Guest Professor at Bina Nusantara University, Indonesia; Japan MICE Ambassador; and Kumamoto City MICE Ambassador. He was Associate Professor at Yamagata University, Japan (2006-2012); Adjunct Professor at Asian University, Taiwan (2019-2021); Invited Professor at City University of Macau, Macau (2018-2020); Visiting Professor at University of Nevada, Las Vegas, USA (2016-2017); Vice-President, International Association for Computer and Information Science, USA (2015-2017); Vice-President, Software Engineering Research Foundation, USA (2013-2018); Visiting Researcher at University of California at Irvine, USA (2010-2011); Research Fellow at Shanghai University, China (2010-2013); and Project Professor of Green Computing Research Center at Nagoya Institute of Technology, Japan (2011-2014); Guest Professor at Nagoya Institute of Technology, Japan (2021-2023); and Research Fellow of SEITI in Central Michigan University, USA (2010-2018). He received his Ph.D. in computer science from Nagoya Institute of Technology in 2006. His current research interests include agent-based electronic commerce, qualitative reasoning and simulation, material informatics, IT and business management, and IoT. Also, he is a professional event planner and event producer. He delivered 200 keynotes and invited talk at international conferences, symposia, and seminars. He also received over 10 awards on research and over 30 research grants from government, research foundations, and company. He has ever presented over 120 papers in journals and over 220 papers in international conference and including top/highranked international journals and conferences, such as, SN Applied Sciences, Data in Brief, Marine Systems & Ocean Technology, International Journal of Neural Systems, International Journal of Business Information Systems, Logic Journal of IGPL, IEEE Access, Heliyon, Applied Artificial Intelligence, Emerging Science Journal, AAAI, IEEE CEC, AAMAS, IEEE WCCI, and WWW. Also, he has published 14 edited books from Springer, IGI-Global, and WIT Press. He has been over 90 international conference organizing chairs (conference chair/ program chair / finance chair / publication chair) of IEEE PRIWEC(2006), IEEE/ACIS SNPD (2009 2012, 2013, 2014, 2015, 2017, 2018, 2019), PRIMA (2009, 2020, 2024), PRICAI (2024), IEEE/ACIS ICIS (2010, 2013, 2015, 2016), IIAI AAI (2012-2024), AAMAS (2013), IEEE/ACIS SERA (2014, 2015), IEEE SOCA (2014, 2017), IEEE TENSYMP (2016), IEEE ICA (2016, 2017, 2023), IEEE SC2 (2017), ASEAN-AI (2018), and other 50 international conferences and workshops.

#### Keynote 2

# From Data to Development: Empirical Approaches in Software Engineering

Simon Xu, Ph.D.

#### **Dean and Professor**

#### **Faculty of Computer Science and Technology**

#### Algoma University, Canada

#### Abstract

Empirical research plays a critical role in advancing software engineering by collecting and analyzing both quantitative and qualitative data to enhance software products, development processes, and project management. Core empirical methods, which includes controlled experiments, case studies, and surveys, offer distinct ways to investigate real-world challenges. These studies typically follow a structured process involving the design of the research setting, data collection, and data analysis. This keynote will provide an overview of key empirical research methods used in software engineering, highlighting their respective strengths and limitations. In particular, the talk introduces a novel method, dialog-based protocol analysis, as an extension to traditional approaches such as introspective, retrospective, and think-aloud techniques. A case study is presented to evaluate the effectiveness of this new method. The presentation concludes with a discussion on the current challenges and future opportunities for empirical research in the evolving landscape of software engineering.

#### **Biography**

Dr. Simon Xu is the Dean and Professor in the Faculty of Computer Science and Technology at Algoma University, where he has been a faculty member since 2002. Prior to his tenure at Algoma University, he was working in the School of Computer Science of University of Windsor, Canada. Additionally, he serves as a guest professor at Wuhan University and the adjunct professor at China University of Mining and Technology, China. Dr. Xu earned his Ph.D. degrees from Wayne State University, in the United States, and the University of Liege in Belgium. His research focuses on software evolution, program comprehension, big data, and cognitive process during software development. Dr. Xu has published more than 90 articles in referred journals and conference proceedings and a few authored/co-authored books. He has chaired seven IEEE international conferences and has been invited to deliver keynotes at various IEEE conferences. He is a senior member of IEEE and a member of ACM.

## **Program in Detail**

### Wednesday, June 25, 2025

07:00am ~ 09:00am - Registration Foyer 09:00am ~ 09:20am - Opening Ceremony **Capri Room** 09:20am ~ 10:10am - Keynote 1 from ACIS **Capri Room** 10:10am ~ 10:30am - Coffee Break Foyer 10:30am ~ 11:20am - Keynote 2 from ACIS **Capri Room** 11:20am ~ 12:10pm - Panel Discussion Sydney Room 12:10pm ~ 13:10pm - Lunch on your own 13:30pm ~ 14:45pm - EAIM Session 1

Metaverse and AI algorithms

Sydney Room C Session Chair: Hochul Shin

A flexible toolkit for real-time action recognition of virtual humans in XR/AR environments Hannes Fassold

The Role of Big Data in Shaping Youth Consumption Culture in AI-Driven Virtual Spaces Jinhee Lee and Jinhee Son

Improving Operational Efficiency in Busan Port: A Predictive Approach to Truck Congestion Seong Hyeon Jo, Ji Yeon Kim, Ki Hwan Kim, Young Jin Kang and Seok Chan Jeong

Reinforcement Learning based Dynamic Asset Allocation using Macro-economic Analysis Jong Ha Jeon and Zoonky Lee

Analyzing Student Dropout Risk Using Weekly Hazard Functions: A Time- Dependent Survival Model Approach Suhyeon Kim, Jeemin Kim, Junseop Ko, Yena Lee, Kyongjin Lee and Yeeun Hwang

#### 14:45pm ~ 15:00pm – Coffee Break

15:00pm ~ 16:15pm - EAIM Session 2 LLM and AI Strategy

Multilingual OA-RAG: Evaluating LLMs' Contradiction Handling in English and Kazakh Arailym Tleubayeva, Aigerim Mansurova, Sultan Aubakirov, Aisultan Tabuldin, Adai Shomanov and Zhansaya Makhambetova

Implementation of RAG-LLM Based AI Agents for Public Service Innovation: RAG System Architecture Analysis and A Cross-National Case Study Jeesun Ryu, Yoonseuk Woo and Kyung Hyun Lee

Discriminant Analysis of Career Types According to Personality Types of Cyber University Students: Focused on GOLDEN Personality Test and Holland's RIASEC Model Jungjae Lee and Youkyung Lee

#### Foyer

Sydney Room C Session Chair: Jongwoo Park Harnessing AI Marketing Strategies for the Senior Consumer Market Jinhee Lee and Jinhee Son

A Method for Enhancing the Quality of Video/Image Data for AI Learning of Unstructured Data. *Seung Hee Kim and Dong Ju Ryu* 

16:15pm ~ 16:30pm – Coffee Break	Foyer		
16:30pm ~ 17:30pm - EAIM Session 3	Sydney Room C		
Data analysis applications - business intelligence	Session Chair: Myungsook Park		
Exploring the Characteristics of the MZ Generation and Their Influence on Kidult Jinhee Lee and Jinhee Son			
An Exploratory Study on the Application of Solution-Focused Brief Therapy in Corporate Coaching <i>Youkyung Lee and Jungjae Lee</i>			
The Competency Framework for Open Source Software Developers Jong-Bae Kim, Sangah Kim and Sungtaek Lee			
A Data Verification Process for Ensuring the Reliability of AI Outputs Dongju Ryu, Seung Hee Kim and Sungtaek Lee			

### 18:00pm ~ 19:30pm - Reception Dinner & Award Ceremony

**Capri Room** 

## **Program in Detail**

### Thursday, June 26, 2025

### 07:00am ~ 13:00am - Registration 08:00am ~ 09:00am - EAIM Session 4 *Logistics–AI interaction*

Sydney Room C Session Chair: Jungjae Lee

Foyer

Climate Modeling in Metaverse Drone Simulators via FedKAN Hyun Su Park, Yong Soo Ahn, Min Soo Kim, Jong Sou Park and Jun Beom Park

Exploring Public Willingness to Use Drone Delivery Services from Convenience Stores Woosik Jeong, Kunwoo Lee, wangsup Shin, Woojung Kim, Jihye Hwang, Deokhee Kim and Kyunghwan Lee

Every Movement You Take Enhances Learning: A Curriculum-Based Multi-Agent Framework for Warehouse Robotics Inhyo Park, Seok Hoon Park and Yoon Hong Min

Framework for Cross-Country Assessment of Logistics Efficiency on Asia-Europe Trade Routes Alina Nikitina, Aiavrina Efimova, Sanaaia Okhlopkova, Solangel De la Rosa, Wooho Kang and Kwansup Shin

#### 09:00am ~ 09:15am - Break

#### 09:15am ~ 10:30am - EAIM Session 5 Human-computer interaction

#### Sydney Room C Session Chair: Jungjae Lee

A Study on the Supervisor Coaching Leadership promotes the Organizational Culture of Members: Self-Leadership, Emotional Labor mitigation, Mediating effects of Organizational Commitment, and Moderating Effects of Human Resource Development *Kim Mi Jeong and Baek Sung Hee* 

The Impact of Sense of Community on Mindfulness: The Mediating Effects of Trust, Norms, and Networks *Younhee Hwang* 

Effects of Emotional Coaching on Self-Adjustment in 5-Year-Old Children Baek Sunghee, Yeum Cheongha and Shin Ho-Chul

A Study on the Effect of Leader's Coaching Behavior on Job Satisfaction and Quiet Quiting Seongsil Jeong

A Study on the Effect of Interpersonal Competence on Turnover Intention Seongsil Jeong

A Study on the Effect of Interpersonal Competence on Turnover Intention Baek Sunghee, Yeum Cheongha and Shin Ho-Chul

10:30am ~ 10:45am – Coffee Break

Foyer

#### 10:45am ~ 12:00pm - EAIM Session 6 **Data Analysis Application-Educational Informatics**

Sydney Room C Session Chair: Jungjae Lee

Exploring Core Competencies for Youth Adaptability in the Age of AI Soim Park, Jiyeun Kim, Heejin Cho

The Effect of Adult Attachment on Organizational Effectiveness Seivon Hong

Impact of Work-Family Facilitation and Conflict on Daily Life Stress among Dual-Income Women: Focusing on the Mediating Effect of Marital Emotional Intimacy Injeong Shin

A Study on the Impact of Supervisors' Coaching Leadership on Organizational Performance - Focusing on the Job Attitudes of Contact Center Employees Kim Mi Jeong

The Impact of Social Capital on Residential Satisfaction by Housing Type. Younhee Hwang

#### 12:00pm ~ 13:30pm – Lunch on (Complimentary)

#### 13:30pm ~ 14:45pm - EAIM Session 7 **Data Science in Educational Coaching**

A Study on the Impact of Work-Family Conflict on Subjective Well-being among Working Mothers with Early Adolescent Children: Focusing on the Mediating Effect of Marital Satisfaction Injeong Shin

Effect of Leader's Coaching Behavior on Quiet Quiting of Organizational Members: Mediating Effects of Work Engagement and Job Satisfaction Seongsil Jeong

Job Satisfaction and Mental Health in Teaching Hospitals: A Qualitative Study Based on Herzberg's Motivation-Hygiene Theory Yeum Cheongha and Baek Sunghee

The Effects of a Mindfulness-Based Group Program on Preschool Teachers' Self-Regulation, Self-Compassion, and Psychological Safety: A Qualitative Study Kim Jiyeun, Park Soim, Cho Heejin

A Study on Copyright Management in Generative AI Technology Environment Youkyung Lee

#### 14:45am ~ 15:00am – Coffee Break

#### 15:00am ~ 16:15am - EAIM Session 8 **Data Analysis Application-Organizational Behavior**

A Study on the Effect of Interpersonal Relationships on Organizational Commitment Seivon Hong

#### Sydney Room C Session Chair: Jungjae Lee

Fover

Sicily Room

Sydney Room C Session Chair: Jungjae Lee A Study on the Effects of Work-Family and Work Parenting Conflicts on Subjective Well-being of Working Mothers: Focusing on the Mediating Effect of Social Support Injeong Shin

A Study on the Impact of Social Capital on Quality of Life *Younhee Hwang* 

A Study on the Structural Relationship between Leader Coaching Behavior and Quiet Quiting and Positive Psychological Capital of Members in an Organization Seongsil Jeong

The Effect of Creative Self-Efficacy on Adaptive Performance of Childcare Teachers: The Dual Mediating Roles of Psychological Capital and Psychological Empowerment *Cho Heejin, Kim Jiveun, Park Soim* 

#### 16:15am ~ 16:30am – Coffee Break

#### 16:30am ~ 17:15am - EAIM Session 9 Digital Service

The Moderating Effect of Leader-Member Exchange (LMX) on the Relationship between Emotional Labor Strategies and Turnover Intention of Childcare Teachers: Focusing on the Mediating Role of Organizational Commitment *Baek Sunghee and Yeum Cheongha* 

The Moderating Effect of Coaching Leadership on the Relationship Between Emotional Labor and Job Burnout Among Contact Center Agents in the AI Era Kim Mi Jeong

Research on the implementation of AI data performance verification tools *Seung Hee Kim and Dongju Ryu* 

### Sydney Room C Session Chair: Sungtaek Lee

Foyer