Final Program

The 1st ACIS International Symposium on Emotional Artificial Intelligence & Metaverse (EAIM)

August 4-6, 2022
Vietnam - Korea University of Information and Communication Technology (VKU)
Da Nang, Viet Nam

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Program at a Glance

Thursday, August 4, 2022

Time	8/4	
	Event	**Location**
9:00 ~ 17:00	Registration	
10:30 ~ 11:00	Opening Ceremony (EAIM & BCD)	VKU** Lobby
11:00 ~ 11:50	Keynote 1	VKU Room A
11:50 ~ 13:00	Lunch	
13:00~ 13:50	Keynote 2	VKU Room A
19:00 ~ 21:00	Welcome Reception (EAIM & BCD)	Muong Thanh Grand Da Nang Hotel*

* Muong Thanh Grand Da Nang Hotel:
962 Ngo Quyen, An Hai Tay, Son Tra, Da Nang city

** VKU (Vietnam - Korea University of Information and Communication Technology):
470 Tran Dai Nghia, Hoa Hai, Ngu Hanh Son, Da Nang city

Program at a Glance

Friday, August 5, 2022

Time	8/5	
	Event	**Location**
9:00 ~ 17:00	Registration	
10:00 ~ 11:50	EAIM Session 1 EAIM Session 2	VKU Room E VKU Room F
11:50 ~ 13:00	Lunch	
13:00 ~ 14:50	EAIM Session 1 EAIM Session 2	VKU Room E VKU Room F
14:50 ~ 15:00	Break	
15:00 ~ 16:50	EAIM Session 1 EAIM Session 2	VKU Room E VKU Room F
16:50 ~ 17:00	Break	
17:00 ~ 18:50	EAIM Session 1 EAIM Session 2	VKU Room E VKU Room F
19:00 ~ 21:00	Award Presentation Dinner Banquet (BCD & EAIM)	

** VKU (Vietnam - Korea University of Information and Communication Technology):
470 Tran Dai Nghia, Hoa Hai, Ngu Hanh Son, Da Nang city

Program at a Glance

Saturday, August 6, 2022

Time	8/6	
	Event	**Location**
9:00 ~ 12:00	Registration	
10:00 ~ 11:50	EAIM Session 1 EAIM Session 2	VKU Room E VKU Room F
11:50 ~ 13:00	Lunch	
13:00 ~ 14:00	Closing Ceremony	VKU Room E

** VKU (Vietnam - Korea University of Information and Communication Technology):
470 Tran Dai Nghia, Hoa Hai, Ngu Hanh Son, Da Nang city

Keynote 1

Temporal Aspects in Big Data

Jixin Ma
Professor of Computer Science
University of Greenwich, U.K. j.ma@gre.ac.uk

Abstract

Scenario recognition is an important technology in Data Science and Artificial Intelligence. It reveals historical patterns, trends and associations related to human behavior and time by computing and analyzing large-scale data sets. Scenario recognition can be used to solve the problems of prediction, decision-making, diagnosis, process management and supervision, historical reconstruction and so on. However, accurate representing and matching scene patterns in big data is a complex problem. This talk will introduce some basic concepts with respects to time, fluent, state and scenario, and related theories and application examples, as well as a framework for scene pattern representation and matching. The framework can effectively represent relative and absolute time knowledge, and solve the calculation problem of temporal similarity by transforming time similarity into graph similarity. As a special case, we will demonstrate how to apply the framework to represent the traffic light control problem of human intersection in time series and state series.

Bio

Dr Jixin Ma is a Full Professor in the School of Computing and Mathematical Sciences, University of Greenwich, U.K. He is the Director of the Centre for Computer and Computational Science, and the Director of School's PhD/MPhil Programme. He is also a Visiting Professor of Beijing Normal University, Auhui University, Zhengzhou Light Industrial University, and City University of Macau. Professor Ma obtained his BSc and MSc of Mathematics in 1982 and 1988, respectively, and PhD of Computer Sciences in 1994. His main research areas include Data Science, Artificial Intelligence and Information Systems, with special interests in Temporal Logic, Temporal Databases, Reasoning about Action and Change, Case-Based Reasoning, Pattern Recognition, Graph Matching and Information Security. He has been a member of British Computer Society, American Association of Artificial Intelligence, ICIS/IEEE, and Special Group of Artificial Intelligence of BCS. Professor Ma has been the Editor of several international journals and international conference proceedings, and Program Chair/Invited Keynote Speakers of many international conferences. He has published more than 150 research papers in international journals and conferences

Practical Cyber-Physical Systems in Industry 4.0 and Society 5.0

Tokuro Matsuo, Ph.D.
Professor, Advanced Institute of Industrial Technology, Japan
tokuro@tokuro.net

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 survey taken in before/after the experiments. I also introduce the environment to provide useful information for 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.

Bio
Dr. Tokuro Matsuo is currently a Full Professor (tenured) at Advanced Institute of Industrial Technology (AIIT) in Public University Corporation Tokyo Metropolitan University from 2012. Also, he is currently a Director of Research Center for Artificial Intelligence and Service Science at AIIT; CEO of International Institute of Applied Informatics (IIAI); a Guest Professor at Bina Nusantara University, Indonesia; a Guest Professor at Nagoya Institute of Technology, Japan; an Adjunct Professor at Asian University, Taiwan; and Japan Conference Ambassador. He was an Associate Professor (tenured) at Yamagata University, Japan (2006-2012); an Invited Professor at City University of Macau, Macau (2018-2020); a Visiting Professor at University of Nevada, Las Vegas, USA (2016-2017); a Vice-President, International Association for Computer and Information Science, USA (2015-2017); a Vice-President, Software Engineering Research Foundation, USA (2013-2018); a Visiting Researcher at University of California at Irvine, USA (2010-2011); a Research Fellow at Shanghai University, China (2010-2013); and a Project Professor of Green Computing Research Center at Nagoya Institute of Technology, Japan (2011-2014); and a Research Fellow of SEITI in Central Michigan University, USA (2010-2018). He received my 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.

Program in Detail

Thursday, August 4, 2022

9:00 – 17:00: Registration

10:30 - 11:00: Opening Ceremony   **VKU Lobby**

11:00 - 11:50: Keynote 1   **VKU Room A**

11:50 - 13:00: Lunch

13:00 - 13:50: Keynote 2   **VKU Room A**

19:00 - 21:00 – Welcome Reception   **Muong Thanh Grand Da Nang Hotel**

Friday, August 5, 2022

9:00 – 17:00: Registration

10:00 - 11:50: EAIM Session 1   **VKU Room E**

AI and Business Model Innovation

Session Chair: Dr. JungJae Lee

A Study on the Effect of Ability to Empathize and Coaching Leadership of Director of Early Childhood Education Institution
Hoi Kyoung Bae, Gina Gim

A Study on the Intention to Use Smart Healthcare
Euntack Im, Nayeon Kang, and Sumin Han

Developing Songjeong Metaverse surfing Village: Development of Metaverse-based Platform Specialized for Marine Tourism
Tae Hwan Yoon , Seok Chan Jeong, and Jong Gyu Do

Metaverse Learning: The Relationship among Quality of VR-Based Education, Self-Determination, and Learner Satisfaction
Gina Gim, Seona Kang, and Hoi Kyoung Bae

10:00 - 11:50: EAIM Session 2   **VKU Room F**

Revitalizing the Metaverse Content Ecosystem: Key Issues

Session Chair: Dr. Dinh Ngoc Thanh

PageRank on Blockchain Transactions and a Measure for Social Credit
Huu Dung Do and Thuat Do

A Study on Artificial Intelligence-Based Edge Analysis for Intelligence of Automated Machining Facilities
Han Lee, Seok Chan Jeong, Dae Hyun Kang, and Seok Chan Jeong

Exploring the truth of applicants through deep learning using EEG-based AI recruitment system
Junghee Lee, Phuong Huy Tung, Euntack Im, and Gwangyong Gim

A Study on the Copyright Management Using Blockchain Technology and NFT
JungJae Lee and Jung Hee Young

11:50 - 13:00: Lunch

13:00 - 14:50: EAIM Session 1   **VKU Room E**

AI and Business Model Innovation

Session Chair: Dr. JungJae Lee

In the COVID-19 Pandemic situation Effect of youths emotional factors on school maladjustment
Jinhee Son

A Study on User Satisfaction and Intention to Continue Use of OTT Platform Digital Content Provision Service
Soo-Yeon Yoon and Jong-Bae Kim

Verification of the impact of CBDC issuance on net interest income of Vietnamese commercial banks
Huong T.L. Dinh and Tu C. Dinh

A Study on ESG Indicator Development Using AHP
Byeongduk Hwang, Myeongsook Park, Jangwoo Kim, and Gwangyong Gim

13:00 - 14:50: EAIM Session 2   **VKU Room F**

Revitalizing the Metaverse Content Ecosystem: Key Issues

Session Chair: Dr. Dinh Ngoc Thanh

Blockchain Technology Utilization Model for Copyright Protection
JungJae Lee and Jung Hee Young

Protecting the rights related to non-personal data in B2B data sharing transactions under the laws in some countries and experiences for Vietnam
Dung Phùng Thị Mỹ

The Effects of Positive Technology Readiness in Smart Airports on Integrated Technology Acceptance Theories and Information-Sharing Intentions
Sora Min and Donghyuk Jo

Trends in Mask Recognition Technology Based on Artificial Intelligence
Ga Won Yu, Seok Chan Jeong, Eun Sung Choi, Young Jin Kang, and Young Joon Jeon

14:50 - 15:00: Break

15:00 - 16:50: EAIM Session 1   VKU Room E
AI and Business Model Innovation
Session Chair: Dr. JungJae Lee

Linking Authentic Leadership to Change-Oriented Behaviors: The Mediating Effect of Workplace
Trust *Aeikyung Kim, Jin Xian, Ho-Chul Shin*

A Study on the Analysis of Related Keywords on the Perception of Untact Coding Education in the post-COVID era Using
Big data Analysis
Soo-Yeon Yoon and Jong-Bae Kim

Effect of youth's Narcissism and Self-esteem on Compensatory Consumption Behavior
Jinhee Son

A Study on the Effect of Omnichannel Customers Acceptance Attitudes and Loyalty
Sora Min and Donghyuk Jo

15:00 - 16:50: EAIM Session 2   VKU Room F
Revitalizing the Metaverse Content Ecosystem: Key Issues
Session Chair: Dr. Dinh Ngoc Thanh

A Study on the Discrimination Model of the Economic Circulation Cycle Based on Popular Songs Using Machine Learning
Technique
Yunhee Choi, Saeyeon Lee, Yoonje Sung, and Saeyeon Lee

A Study on the Strategic Positioning of Metaverse Application Using Online Review Data: Focusing on SWOT Analysis
Jina Lee, Euntack Im,Inmo Yeo, and Gwangyong Gim

Association of Weight Change with Risk of Primary Liver Cancer in Middle-aged Men with Chronic Liver Disease: A
Nationally Representative Cohort Study
*Sung Soo Yoon, Yo Hwan Lim, Hye jun Kim, Sung Soo Jung, Myeong Hoon Lee, Sang jun Lee, Seogsong Jeong, Dan Bee
Pyun, and Hyun Wook Han*

Metaverse Current Status and Prospects: Focusing on Metaverse Field Cases
Jina Lee, Inmo Yeo, and Heewon Lee

16:50 - 17:00: Break

17:00 - 18:50: EAIM Session 1   VKU Room E
AI and Business Model Innovation
Session Chair: Dr. JungJae Lee

Linking Transformational Leadership to Organizational Commitment: A The Moderating Effect of Motives on Volunteering
Hye-Kyu An, Jin Xian, and Ho-Chul Shin

Digital Music Content Life Cycle Study in K-pop Platform
Saeyeon Lee, Minwoo Lee, Younghoon Kim, and Gwangyong Gim

Method of Selecting the Optimal Location of Barrier-Free Bus Stops Using Clustering
Se Hyoung Kim, Juyoung Kang, Chae Won Pyun, Jeong Yeon Ryu, and Yong Hyun Kim

A Study on the Effect of Customer Usage on the Intention of Continuously Coffee Brand App based on UTAUT Model
Sumin Han, Myeongsook Park,Hyojin Yook, and Gwangyong Gim

17:00 - 18:50: EAIM Session 2   VKU Room F
Revitalizing the Metaverse Content Ecosystem: Key Issues
Session Chair: Dr. Dinh Ngoc Thanh

Analysis of common adverse events following COVID-19 vaccination in patients with type 2 diabetes using real-world data
*Myunghee Hong, KangHyun Kim, Soonok Sa, Dan Bee Pyun, Myung-Gwan Kim, Chae Won Lee, Seogsong Jeong, Ju Hee
Kim, Sung Soo Yoon, and Hyun Wook Han*

Visual recognition of artificial intelligence Open source comparison study_Focusing on the situation of people
Minku Kang, Kyunghyun Lee, and Phuong Huy Tung

A Study on Technology-driven Food Industry of South Korea
Seo Young Kim and Min Seo Park

A Study on Development of Evaluation Indicators for Diagnosis of Digital Transformation Capability_Focused on the Financial Industry
Sungwoo Hong, Byeongduk Hwang, Jaehwan Kwon, and Byeongduk Hwang

Problems and Issues of Emotional Computing and Artificial Emotional Intelligence: A Review of Rosalind W. Picard's thesis "Affective Computing: Challenges"
Jina Lee, Dong Cheol Kim, and Saeyeon Lee

19:00 - 21:00: Award Presentation/Dinner Banquet

Friday, August 6, 2022

9:00 – 12:00: Registration

10:00 - 11:50: EAIM Session 1   **VKU Room E**

AI and Business Model Innovation
Session Chair: Dr. JungJae Lee

Face doesn't always tell the truth about emotion, but brain does: Evidence from EEG
signal *Phuong Huy Tung, Yangyoung Kun, Jisook Kim, and Gwangyong Gim*

The SPICE Factor of Metaverse in the MICE Industry and the Influence on Loyalty and Intention to Attend MICE events
Min Suk Kim, Tae Hwan Yoon, Jun Heo, and Seok Chan Jeong

The Features of MZ Generation and Kidult Marketing
Jinhee Lee and Beonghwa Jeon

The Effect of Mother's Parenting Behavior on Child's Adjustment to School: The Mediating Effect of Child's Self-esteem
Seona Kang and Gina Gim

Marketing Activities for the Changing Metabus Market
Jinhee Lee

10:00 - 11:50: EAIM Session 2   **VKU Room F**

Revitalizing the Metaverse Content Ecosystem: Key Issues
Session Chair: Dr. Dinh Ngoc Thanh

Trends in Artificial Emotional Intelligence Technology and Application
Yongmin Song, Jeon Beonghwa, and Phuong Huy Tung

Methodology for Urban Cool Loop Applications Using Satellite Images
Jaehyung Park, Juyoung Kang, and Sangun Park

Printed wearable pressure sensor using interdigitated capacitor for application in smart
textile *Tranthuynga Truong, Ji-Seon Kim and Jooyong Kim*

Robot, AI and Service Automation (RAISA) in Airports: the Case of South Korea
Seo Young Kim and Min Seo Park

Study on the Relative Importance of Emotional Intelligence Industry Revitalization Factors Using AHP Analysis : Focused
on the Use of Artificial Emotional Intelligence
Yongmin Song, Minwoo Lee, and Junghee Lee

11:50 - 13:00: Lunch

13:00 - 14:00: Closing Ceremony   **VKU Room E**