

Session Information

July 8, 2024 (Monday)				
Time	Content			
13:00~13:30	Registration			
13:00~14:30	ISASD 2024			
	Session A1	Session A2	Session A3	Session A4
14:55~15:00	Opening (西九館 ディジナル多目的ホール)			
15:00~16:00	Keynote Speech I (西九館 ディジナル多目的ホール)			
16:10~17:00	Keynote Speech II (西九館 ディジナル多目的ホール)			
18:30	Banquet			

Keynote Speech I

Keynote Speaker: Prof. Matthieu J. Guitton



- Editor-in-Chief of Computers in Human Behavior (the world-leading journal in the field of cyberpsychology)
- Editor-in-Chief of Computers in Human Behavior: Artificial Humans
- Editor-in-Chief Emeritus of Computers in Human Behavior Reports

Title: Could Artificial Humans be our partners for a sustainable future?

Author Biography

Prof Matthieu J. Guitton, Ph.D., FRAI, is Full Professor at the Faculty of Medicine and at the Graduate School of International Studies at Université Laval (Quebec City, QC, Canada), Bualuang ASEAN Professor Chair at Thammasat University (Bangkok, Thailand), Fellow of the Royal Anthropological Institute of Great Britain, and Senior Researcher/Group Leader at the CERVO Brain Research Center (Quebec City, QC, Canada). He is the Editor-in-Chief of Computers in Human Behavior (the world leading journal in the field of cyberpsychology with an Impact Factor of 9.9), Founding Editor and Editor-in-Chief of Computers in Human Behavior: Artificial Humans, Editor-in-Chief Emeritus of Computers in Human Behavior Reports, and serves on several other editorial boards, such as Acta Psychologica and Current Opinion in Behavioral Sciences. A graduate from the University of Rouen and Université Pierre et Marie Curie - Paris VI, he obtained his PhD from the University of Montpellier (France) and was a Koshland Scholar/Postdoctoral Fellow of Excellence at the Weizmann Institute of Science (Israel). He has published over 120 research papers, book chapters, or editorials on subjects ranging from cyberpsychology and cyberbehavior to the societal impacts of technology. He has been invited speaker or guest lecturer by numerous universities across the world, such as the University of Oxford, Embry-Riddle Aeronautical University (USA), the University of Pittsburgh (USA), the Russian Academy of Science, Hong Kong Baptist University, or Renmin University of China. His research deals with cyberbehavior, ranging from the study of virtual communities to eHealth, and from digital inequalities to cybersecurity.

Keynote Speech II

Keynote Speaker: Prof. Kevin K.W. Ho



- Editor-in-Chief of Journal of Organizational Computing and Electronic Commerce

Title: Misinformation, Disinformation and Fake News: Its implication to our daily life and our society

Author Biography

Prof. Kevin K.W. Ho joined the MBA Program in International Business, Graduate School of Business Sciences, Humanities and Social Sciences, at the University of Tsukuba in April 2022. He received his Ph.D. in Information Systems from the Hong Kong University of Science and Technology in 2008. Over the past twelve years, he has been teaching at the University of Guam. Kevin's research focuses on electronic service, information systems and social media commerce strategy, fake news and misinformation, and sustainability management. His research has been published in Behaviour & Information Technology, Communications of the Association for Information Systems, Computers in Human Behavior, Decision Support Systems, Government Information Quarterly, Health Policy, IEEE IT Professional, Information Systems Frontier, Information & Management, Internet Research, Journal of Retailing and Consumer Sciences, etc. He is currently the Editor-in-Chief of Journal of Organizational Computing and Electronic Commerce.

ISASD 2024 Program

Date: July 8, 2024 (Monday)

館前會館 小會議室 2 (3 階) (PM 13:00 – 14:30)		
Session Chair (A1) Prof. Kuay-Keng Yang kuaykeng@gmail.com		
No.	Paper Title	Authors
1	Sustainable Development of Medical Packaging Improvement and Innovative AR Application Systems	Lin Jia-Yu, Lin Chia-Chen, Huang Song-Wei, Lin Yu Chin and Wang Cheng-Hung
2	The Impact of Integrating Virtual Reality into Junior High School Chemistry Classrooms on Learning Outcomes for Students with Different Technology Acceptance Patterns and Learning Styles	Ho Shit-Ting, Cheng Chia-Min, Li Rou, Chan Tzu-Hsin and Wang Cheng-Hung
3	Analyzing the Relationship between STEM Education and Virtual Reality: A Comparative Study	Nontachai Samngamjan, Pierre Dave Victor Katuhe, Regina Marintan Silalahi, Sheng-Yi Wu, and An-Chao Tsai
4	Perception of Taiwan Elementary School Teachers in an AV/VR-led STEM Instruction	Alfine Chia-Hsin He, Nino Philip Fernandez, Sopanut Suya and An-Chao Tsai
5	Contribution of Creativity Thinking on Students STEAM Project-Based Learning	Kuay-Keng YANG, Sheng-

		Yi Wu and Yi-Hung Liao
6	Unveiling the Digital Divide: Exploring Cognitive Age's Influence on Mobile Banking Adoption Among Seniors through the Analytic Hierarchy Process	Silvia Wan-Ju Liang and Yu-Cheng Chiu
7	Understanding UTAUT 2's Role in Shaping User Behavior: The Case of Line Pay in Taiwan	Silvia Wan-Ju Liang, Febriyanti Rukmana, Kuo-Chang, Chung

Date: July 8, 2024 (Monday)

西九館 コラボレーションルーム 1 (PM 13:00 – 14:50)		
Session Chair (A2) Prof. Chih-Chao Chung ccchung@ntin.edu.tw Prof. Sung-Wen Yu oilwarm2228@gmail.com		
No.	Paper Title	Authors
1	A Study on Facial Detection for the Concentration Analysis of Learners in Distance Learning	Yi-Jhih Syu, Shu-Wei Guo, Jia-Hung Weng, Chun-Chih Lo, Chin-Shiuh Shieh, Mong-Fong Horng
2	Inquiry and Practice: Developing Competency Indicators for an Artificial Intelligence and Deep Learning Course for Ordinary High Schools	Yung-Chang Lin, Shi-Jer Lou
3	Exploration of the Influence of Artificial Intelligence and Deep Learning on the Learning Attitudes, Performance, and Satisfaction of General Senior High School Students: A Study Based on the Technology Acceptance Model	Yung-Chang Lin, Yu-Ming Cheng
4	A Study on the Establishment and Importance Assessment of Indicators for the Learning Competency of Vocational High School Students in Electric Vehicles	Cheng-lung Tsai, Chih-Chao Chung, Yu-Chun LIN, Shi-Jer Lou
5	Exploring the Potential of Multimedia E-books in Elementary Education: A Study of Mandarin Subject	Chih Hsiang Wang and Sung-Wen Yu
6	Development and Application of Generative Artificial Intelligence in Education: Trends and Prospects	Hanqing Xu, Junqi Wang, Yushun Su

7	Exploring the Impact of Innovation and Entrepreneurship Competitions on College Students' Entrepreneurial Intentions from a Regional Perspective	Sainan Wu, Junqi Wang, Yushun Su
8	The strategy of collaboration between universities of science and technology and technical high schools for the consistent talent cultivation of technical and vocational education	Chun-Chung Chen, Yao- Ming Chu, Yi-Chang Chen, Chih- Chao Chung and Shi-Jer Lou
9	Pioneering Maker Education: Competency Innovation for High School Precision Health Special Course	Cheng-Chuan Lu, Chih- Chao Chung, Yu-Chu Lin and Shi-Jer Lou
10	Constructing a VTuber Innovative Entrepreneurship Curriculum and Teaching Model Based on Effectuation Theory	Chun-Chung Chen, Yao- Ming Chu, Chih-Chao Chung and Shi-Jer Lou

Date: July 8, 2024 (Monday)

西九館 コラボレーションルーム 2 (PM 13:00 – 14:30)		
Session Chair (A3) Prof. Chih-Hsien Hsia hsiach@niu.edu.tw Prof. Kai-Wen Lien lkw2@ulive.pccu.edu.tw		
No.	Paper Title	Authors
1	VLSI Implementation of Enhanced Image Classification Using Recursive Convolutional Neural Networks	Kai-Fen Chang and Yuan-Ho Chen
2	The Cultural and Educational Value of Virtual Tourism: The Potential of XR Platforms as Tools for the Dis-semination of Cultural Heritage	Wei-Yu Chen
3	An Improved Spatial Transformer Network based on Lightweight Localization Net (L-STN)	Tzu-Han Hsu, Shin-Jye Lee and Hong-Yu Hsu
4	Enhancing Learning Motivation and Achievements in Programming Courses through a Combined Flipped Classroom and Online Learning Platform Approach	Kai-Wen Lien and Yih-Jiun Lee
5	Combining Textual and Visual Cues for Robust Fake News Detection	Szu-Yin Lin, Yu-Han Chang, Ruei-Cing Jang, Bo-Yu Chen and Ying-Ren Chien
6	A Classification of Distracted Driving Behaviors Based on Deep Learning and Human Posture	Sheng-Tao Chen, Chih-Hsien Hsia and Yo-Cheng He
7	A Study on the Application of Generative AI for Virtual Clothing Try-On Systems	Jin-Hui Jiang, Yung-Hsin Kao,

		Bo-Chen Lai and Chih- Hsien Hsia
8	A Study on Malicious Website Detection Using Deep Learning	Yu-Ming Hsiao, John Hao-En Young and Chih-Hsien Hsia
9	Key Node Ranking in Social Networks Based on Information Entropy Contribution Matrix	Junjun Zhang, Haoran Mo and Qian Li

Date: July 8, 2024 (Monday)

館前會館 小會議室 3 (3 階) (PM 13:00 – 14:50)

Session Chair (A4)

Bai Qian 1658521929@qq.com

Shuwen Wang 220602162@njnu.edu.cn

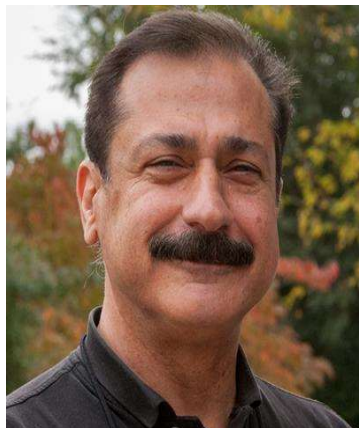
Paper ID	Paper Title	Authors
1	Constructing Teachers' Pedagogical Literacy Assessment Framework in Smart Classrooms	Yu Haoran, Wu Wentao and Gong Xue
2	Effects of Self-Cognition on Chinese University Students' Information Literacy Capacity under the Impact of Learning Self-efficacy	Xia Zhao and Cheng Wang
3	Research on the Role of Cueing in Instructional Video in Guiding Learning Effect: Based on an Eye Movement Experience	Liu Hehai and Chen Zixua
4	Connotation, Application and Value of "3-2-1 Strategy" in the University Classroom	Qian Bai
5	Investigating cognitive engagement patterns in online collaborative learning: A temporal learning analytic study	Jin Zhou
6	A Bibliometric Analysis of Human-machine interaction: A Review of Influential Aspects and Conceptual Structure	Suqi Li and Shuwen Wang
7	Constructing a Computational Thinking Evaluation Framework for Pupils	Xiao Wang and Li Zhao
8	Critical Analysis of the Technological Affordances, Challenges and Future Directions of Generative AI in Education: A Systematic Review	Nan Wang
9	Use Epistemic Network Analysis to Explore Individual Differences in Self-regulated Learning of Heterogeneous Metacognitive Students	Xingyu Geng

Session Information

July 9, 2024 (Tuesday)			
Time	Content		
9:00~9:30	Registration		
9:00~10:00	ISASD 2024		
	Session B1		
9:30~10:30	ISASD 2024		
	Session B2	Session B3	
10:00~11:00	ISASD 2024		
	Session B4	Session B5	
11:00~12:00	Keynote Speech III (西九館 コラボレーションルーム)		
12:00~13:00	Lunch		
13:00~14:00	ISASD 2024		
	Session B6	Session B7	Session B8
14:00~15:00	ISASD 2024		
	Session B9	Session B10	
15:00~16:00	Keynote Speech IV (西九館 コラボレーションルーム)		
16:00~17:00	ISASD 2024		
	Session B11	Session B12	Session B13

Keynote Speech III

Keynote Speaker: Prof. Hamid R. Arabnia



- Editor-in-Chief of The Journal of Supercomputing

Title: *The Impact of Artificial Intelligence: Good and Bad!*

Author Biography

Hamid R. Arabnia received a Ph.D. degree in Computer Science from the University of Kent (England) in 1987. He is currently a Professor Emeritus of Computer Science at University of Georgia (Georgia, USA), where he has been since October 1987. He has graduated 21 PhD students (as of Year 2023). His research interests include Data Science, Machine Learning, STEM education, HPC/supercomputing, imaging science, and other compute intensive problems. His most recent activities include: Studying ways to promote legislation that would prevent cyber-stalking, cyber-harassment, and cyber-bullying. As a victim of cyber-harassment and cyber-bullying, in 2017 and 2018 he won a lawsuit with damages awarded for a total of \$3 Million (includes \$650K awarded for attorney's costs). Since this court case was one of the few cases of its kind in the United States, this ruling is considered to be important. Prof. Arabnia is Editor-in-Chief of The Journal of Supercomputing (Springer). He is the book series editor-in-chief of "Transactions of Computational Science and Computational Intelligence" (Springer). He is the editor of annual proceedings of Computational Science and Computational Intelligence (Publisher: IEEE CPS). He is an Associate/Guest co-Editor of IEEE Access journal (2019/2020). He is a Senior Adviser to a number of corporations and is a Fellow and Adviser of Center of Excellence in Terrorism, Resilience, Intelligence & Organized Crime Research (CENTRIC). He has served as a member of National Science Foundation (NSF) Site Visitation evaluation committee for 10 years. He has received numerous distinguished awards; including:

from BIBE IEEE/SMC, ACM SIGAPP IMCOM, and others. Prof. Arabnia has about 280 peer-reviewed research publications as well as 250 edited research books in his areas of expertise (some of these books and journal special issues have received the top 25% downloads in their respective fields). His 20 edited books entitled "Frontiers in Education: CS & CE" has been highly cited by the research community. He has been a PI/Co-PI on about \$12 Million externally funded projects/initiatives. During his tenure as Graduate Coordinator/Director, Prof. Arabnia secured the largest level of funding in the history of the department for supporting the research and education of graduate students (PhD, MS). Prof. Arabnia has delivered a number of keynote and plenary lectures at international conferences; most recently at: IEEE ICPADS, IEEE HPCC, ACM IMCOM, and others. He has also delivered a number of "distinguished lectures" at various universities and research units/centers. According to Stanford University, Prof. Arabnia is among the top 2% impactful scientist.

Keynote Speech IV

Keynote Speaker: Prof. Mario Köppen



- Editor in Chief, Applied Soft Computing (ASOC)

Title: TBD

Author Biography

Mario Köppen was born in 1964. He studied physics at the Humboldt-University of Berlin and received his master degree in solid state physics in 1991. Afterwards, he worked as scientific assistant at the Central Institute for Cybernetics and Information Processing in Berlin and changed his main research interests to image processing and neural networks. From 1992 to 2006, he was working with the Fraunhofer Institute for Production Systems and Design Technology. He continued his works on the industrial applications of image processing, pattern recognition, and soft computing, esp. evolutionary computation. During this period, he achieved the doctoral degree at the Technical University Berlin with his thesis works: "Development of an intelligent image processing system by using soft computing" with honors. He has published more than 150 peer-reviewed papers in conference proceedings, journals and books and was active in the organization of various conferences as chair or member of the program committee, incl. the WSC on-line conference series on Soft Computing in Industrial Applications, and the HIS conference series on Hybrid Intelligent Systems. He is founding member of the World Federation of Soft Computing, and also Editor of the Applied Soft Computing journal. In 2006, he became JSPS fellow at the Kyushu Institute of Technology in Japan, and in 2008 Professor at the Network Design and Reserach Center (NDRC) and 2013 Professor at the Graduate School of Creative Informatics of the Kyushu Institute of Technology, where he is conducting now research in the fields of multi-objective and relational optimization, digital convergence and

multimodal content management.

ISASD 2024 Program

Date: July 9, 2024 (Tuesday)

館前會館 小會議室 2 (3 階) (AM 9:00 – 10:00)		
Session Chair (B1) Prof. Jiunn-Woei Lian jwlian@nutc.edu.tw		
No.	Paper Title	Authors
1	Will users continue using SRT? Smart Retail Technology (SRT) Attributes, Usage Evaluation and Continuous Intention	Fan-Yun Pai, Tsu-Ming Yeh, Yi-Zhen Jiang and Tan-Wei Chao
2	Factors Influencing the Use of Interactive Intelligent Health Promotion Equipment	Tsu-Ming Yeh, Fan-Yun Pai, Hsiao-Yuan Lu and Hsiu-Lin Chen
3	A Study on the Implicit Use of Design Thinking in Japanese Small and Medium-sized Manufacturing Companies	Makoto Shinnishi
4	The Kehai Experience: A Preliminary Study on the Human Ability to Sense Another Person's Presence Nearby	Ryo Teraoka
5	Customer AI Service Index (CASI): A Multiple-Item Scale for Measuring Customer AI Service Acceptance	Jiunn-Woei Lian, Pei-Rong Liao and Yung-Han Liao
6	Understanding User Experience of Inclusive Technology: A Case Study on Social Welfare Meal Delivery App	Jiunn-Woei Lian, Yung-Han Liao and Pei-Rong Liao

Date: July 9, 2024 (Tuesday)

西九館 コラボレーションルーム 1 (AM 9:30 – 10:30)		
Session Chair (B2) Prof. Chei-Chang Chiou ccchiou@cc.ncue.edu.tw		
No.	Paper Title	Authors
1	A Study on Improving the Service Quality of After-School Childcare Programs at Elementary School: Hedong Elementary School in Taiwan as An Example	Po-Shun Chuang, Ling-Hsuan Cheng and Chen-Nuna Hsu
2	Relationship among Leadership Behavior, Organizational Culture and Leadership Effectiveness: A Government Bank as an Example	Chieh-Jung Chang, Tan-Wei Chao, Hsiao-Ting Shih and Ying-Jiun Hsieh
3	The Relationship between Mentorship, Learning Transfer, and Business Performance: A Case Study of Life Insurance Agents in Taiwan	Wen-Yen Huang, Ling-Yu Wang, Ling-Hsuan Cheng and Tsang-Kai Hung
4	Exploring the Impact of Job Rotation Intention on Organizational Commitment Among University Administrative Staff in Central Taiwan: The Role of LMX relationship as a Moderator	Ling-Yu Wang, Wen-Yen Huang, Lung-Teng Yang, Chen-Liang Lin and Tsang-Kai Hung
5	The Relationship between Environment Carbon Emissions and Firm Value: The Moderating Effect of Corporate Governance	Chei-Chang Chiou, Fang-Chi Peng,

		Lung-Teng Yang and Wen-Yen Huang
6	Augmented Reality Animated Multidimensional Concept Maps Multimedia Learning Materials on Enhancing Positive Emotions and Cognitive Outcomes	Chei-Chang Chiou, Tan- Wei Chao and Shiao- Ting Shih

Date: July 9, 2024 (Tuesday)

西九館 コラボレーションルーム 2 (AM 9:30 – 10:30)		
Session Chair (B3) Prof. Cheng-Feng Wu cfwu@gm.ntpu.edu.tw		
No.	Paper Title	Authors
1	An Empirical Study on the Impact of Executive Characteristics Based on the ESG Framework on Corporate Investment Efficiency	Ling-Chen Yang, Yi-Chun Lin and Chien-Jung Chang
2	Study on the Perceived performance appraisal fairness and Work engagement: With Meaning Fulwork and Organization-based Self-esteem as Mediating Variables	Hung Tsang-Kai, Cheng Che-Chang, Chen Wei-Hsiang, Lin Tzu-Hsiung and Chao Li-Wen
3	Studying the Production Efficiencies of Taiwan's Public Accounting Firms under the Framework of Two-stage Models	Yi-Chun Lin, Kuo-Jui Huang and Hui-Ju Tao
4	Using Financial Indicators and Text Sentiment Analysis to Predict Financial Distress in Chinese Real Estate	Cheng-Feng Wu, Kunkun Zhang, Shian-Chang Huang, Chei-Chang Chiou, Chen Nuna Hsu and Meng-Chen Lin
5	The Effects of Positive Psychological Capital and Job Engagement on Role-Based Performance	I-Chieh Hsu, Tai-Ching Yu, Chien-Ya Lin and Shih-Hsiung Hsiao

6	Research on the Redundant Taxation of Beneficial Interest Equity Trusts	Hsiao-Ting Shih, Chieh-Jung Chang and Lung-Teng Yang
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Date: July 9, 2024 (Tuesday)

館前會館 小會議室 3 (3 階) (AM 10:00 – 11:00)

Session Chair (B4)

Prof. Jing-Wei Liu jwliu@ntus.edu.tw

No.	Paper Title	Authors
1	Applying Feature Selection and Patient Rule Induction Method to Explore Association Rules and Scenario Patterns in Elite Table Tennis Matches	Jing-Wei, Liu, Ming-Hua Hsu, Chun-Liang Lai and Sheng-K Wu
2	Using the entropy algorithm to develop a course positioning model for the teaching field of mountain education	Kai Lin Huang, Che-Wei Chang and Yung-Wen Hsu
3	Exploring the Factors Influencing Continued Engagement in Esports Gaming: A Study Using the Hedonic Motivation Satisfaction Adaptation Model (HMSAM)	Yan-Jun Li, Jing-Wei Liu, and Sheng-Hsiang Chen
4	The Impact of YouTuber Credibility on Audience Perception and Intentions towards Street Performances: An Application of the Theory of Planned	Hsin-Yi, Chang, Jing-Wei Liu and Sheng-Hsiang Chen
5	Constructing ESG Indicator Importance for Industry and Investor Decision-Making	Shih-Chin Tan and Jia-Jeng Hou
6	The Impact of Floor Curling Courses on Active Aging of the Elderly	Ming-Tsang Tsai and Hsin-Tzu Lin
7	The Impact of Cooperative Learning Instructional Strategies on Cognitive Function in Elderly Cognitive Fitness Training Programs	Hsin-Tzu, Lin and Ming-Tsang Tsai

Date: July 9, 2024 (Tuesday)

館前會館 小會議室 2 (3 階) (AM 10:00 – 11:00)		
Session Chair (B5) Prof. Yi-Hui Liu ursula@nutc.edu.tw		
No.	Paper Title	Authors
1	Smart Healthcare Information Services with Elderly-Friendly Interface Design: A Smart Chatbot System for Elderly Patients	Tai-Liang Chen, Chao-Hung Kuo, Chun-Hung Chen and Liu Yi-Hui
2	The Impact of “Micro-Courses” on the Development of Online Learning of Senior Citizens	Yi-Hui Liu
3	Predictive Analysis of Purchase of Commercial Long-Term Care Insurance Using Machine Learning Method	Chia-Hui Hou
4	A Study on the Impact of Online Learning Mode Applied to Dementia Public Awareness Program on Adult Learners' Dementia Public Awareness and Community Dementia Friendliness	Chia-Hui Hou
5	Building a Resilient and Healthy Community that is Livable for the Elderly – Service Design and Effectiveness Evaluation of Taiwan's Community Health Promotion Plan	Chia-Hui Hou
6	Constructing a Successful Employment Model Using the Q Methodology	Yi-Ting Hsiao, Yi-Hui Liu and Yi-Ting Chao
7	Constructing a Predictive Model for Win-Loss Outcomes of Elite Table Tennis Players by Integrating Rough Set Theory and Deep Neural Networks	Jing-Wei, Liu , Ming-Hua Hsu , Chun-Liang Lai and Sheng-K Wu

Date: July 9, 2024 (Tuesday)

館前會館 小會議室 2 (3 階) (PM 13:00 – 14:00)		
Session Chair (B6) Prof. Hsiu-Sen Chiang hschiang@nutc.edu.tw		
No.	Paper Title	Authors
1	Assisted Diagnosis of Parkinson's Disease Based on Hand-drawn Spiral Graph	Chiao-Ya Wei, Pin-Ruei Huang and Hsiu-Sen Chiang
2	Forecasting Financial Commodity Prices Using Temporal Convolution Network	Xin-Fang Zhang, Can-Cheng Yan and Hsiu-Sen Chiang
3	Development of EEG-based Memory Evaluation and Training System	Yi-Ching Lee, Hsin-Ho Hsu and Hsiu-Sen Chiang
4	Applying Text Mining and Machine Learning for Unboxing Video Recommendations - A Case Study on Laptop Computers	Yen-Ling Huang, Fu-Sheng Chen and Hsiu-Sen Chiang
5	Exploring the Impact of AI-Generated Advertising Copywriting on Consumption Intention with AIDA Theory	Guan-Hua Li, Szu-Jung Peng and Kuo-Lun Hsiao
6	Investigating the Impact of Features on Parents' Purchase Intention for Children's Smartwatches	Kuo-Lun Hsiao and Ya-Chu Chang
7	Minimizing the makespan of interdisciplinary jobs assigned to multi-skilled workers considering a learning effect	Jen-Ya Wang

Date: July 9, 2024 (Tuesday)

西九館 コラボレーションルーム 1 (PM 13:00 – 14:00)		
Session Chair (B7) Prof. Sheng-Long Kao slkao@mail.ntou.edu.tw		
No.	Paper Title	Authors
1	A Study on Applying the SHEL Analysis Framework to Risk Assessment of Autonomous Ships	Yu-Kai Huang, Cheng-Hsien Hsieh, Shuen-Tai Ung and Shu-Mei Wang
2	Fuzzy Z-AHP Method for Evaluating Delivery Performance: Applied to the Selection of Logistics Service Providers by E-commerce	Ming-Feng Yang, Chia-Chia Kuo, Yu-Chieh Fu and Yen-Ting Chao
3	Minimizing Order Picking Travel Distance Using a DNN-Based Method within a High-Level Storage Warehouse	Ming-Feng Yang, Sheng-Long Kao, Ching-Cheng Hsu, Jeng-Chung Chen, Jen-Chieh Wang, Jun-Yuan Kuo and Kai-Wei Fu
4	Vendor Managed Inventory with Consignment for Integrated Inventory Model with Imperfect Preventive Maintenance	Chien-Min Su, Ming-Feng Yang, Sheng-Long Kao and Yu-Xiang Huang
5	Supply Chain Preventive Maintenance Inventory Model with Consideration	Meng-Ru Tu, Ming-Feng

	Progressive Carbon Taxation	Yang, Kao-Sheng Long, Zhi-Wen Teo, Jeng-Chung Chen, Jen-Chieh Wang, Jun-Yuan Kuo and Kai-Wei Fu
6	Bio-Inspired Algorithms for Optimizing Hyperparameters of Image Classification Models	Yi-Syuan Wang and Mu-Yen Chen

Date: July 9, 2024 (Tuesday)

西九館 コラボレーションルーム 2 (PM 13:00 – 14:00)		
Session Chair (B8) Prof. Chien-Chang Chou ccchou@nkust.edu.tw		
No.	Paper Title	Authors
1	Integrated Single Vendor and Multiple Buyers Inventory Deteriorating Model	Ming-Feng Yang, Sheng-Long Kao, Cho-Ying Lee, Jeng-Chung Chen, Jen-Chieh Wang, Jun-Yuan Kuo and Kai-Wei Fu
2	Analysis of Fuzzy Method for Taiwan Western Windfarm Precautionary Area	Tzu-Chieh, Lo, Sheng-Long Kao, Sin-Der Lee Hong-Yi Jhu and Chien-Chang Chou
3	A New Metaheuristic Algorithm Base on Deep Learning for Order Batching Problem in a Pick-and-Pass Warehousing System	Min-Der Ko, Ming-Feng Yang, Yuan-Rei Chen, Jeng-Chung Chen, Jen-Chieh Wang, Jun-Yuan Kuo and Kai-Wei Fu
4	Developing Picking Route Policies with Genetic Algorithms and Order Batching with Deep Neural Networks in Picker to Part Warehouse	Min-Der Ko, Ming-Feng Yang, Yu-An Chiang, Jeng-

		Chung Chen, Jen-Chieh Wang, Jun- Yuan Kuo and Kai-Wei Fu
5	Synchronized Unequal-Sized Delivery Imperfect Preventive Maintenance Logistic Inventory Model	Meng-Ru Tu, Ming-Feng Yang, Kao- Ser Long, Po- Cheng Li, Jeng-Chung Chen, Jen- Chieh Wang, Jun-Yuan Kuo and Kai- Wei Fu
6	Applying Deep Learning to Track the Trajectory of Barbell Movements in Weightlifting	Yu-En Tseng, Jao-Chuan Lin, Tz-Jin Huang and Jen-Chun Lee

Date: July 9, 2024 (Tuesday)

館前會館 小會議室 2 (3 階) (PM 14:00 – 15:00)		
Session Chair (B9) Prof. Sin-Der Lee leesd@mail.ntou.edu.tw		
No.	Paper Title	Authors
1	An Exploring Precision Positioning System and Guidance Technology for Underwater Vehicle	Sin-Der Lee, Hong-Yi Jhu and Sheng-Long Kao
2	An Observation of AIS Messages Propagation in the Maritime Supply Chain - A Case Study of the Waters near Keelung	S.T. Chen and C.H. Chan
3	A Robust Underwater Image Enhancement Algorithm	Kuo-Jui Hu, Sin-Der Lee and Sheng-Long Kao
4	Maritime Logistics Process Integration using Blockchain Smart Contract based on Petri Net Models	Mengru Tu and Yen-Cheng Paibb
5	Novel Invariant-Based and Quantum-Inspired Petri net Modeling Approach for Fault Detection Cyber-Physical Systems	Mengru Tu, Ming-Feng Yang and Hsiuchi Chang
6	Constructing Artistic Body Detection Based on Behavioral Internet of Things	Shu-Chin Wu

Date: July 9, 2024 (Tuesday)

西九館 コラボレーションルーム 1 (PM 14:00 – 15:00)		
Session Chair (B10) Prof. Long-Sheng Chen lschen0227@gmail.com		
No.	Paper Title	Authors
1	AI Adoption Challenges for E-Automated Manufacturing Systems: A Total ISM Approach	Long-Sheng Chen, Meghana Chowdary K and Venkateswarlu Nalluri
2	Using natural language processing to compare differences of perspectives in short videos on the Israel-Palestine conflict	Long-Sheng Chen and Cheng-Chin Ho
3	Forecasting the employability of Vietnamese fresh graduates for sustainable development	Thao-Trang Huynh-Cam, Long-Sheng Chen, Tzu-Chuen Lu and Van-Canh Nguyen
4	Mixture of Experts Model for Images and Text Multi-modal Fake News Detection	Yiyun Wang, Eiichiro Kodama, Jiahong Wang, Bhed Bahadur Bista, Longsheng Chen and Toyoo Takata
5	Identifying Criteria for Selecting Blockchain as a Service (BaaS) Platform for Supply Chains	Shang-Ching Kuei and Mu-Chen Chen

Date: July 9, 2024 (Tuesday)

館前會館 小會議室 2 (3 階) (PM 16:00 – 17:00)		
Session Chair (B11)		
Prof. Jun-Hong Shen shenjh@nuu.edu.tw		
No.	Paper Title	Authors
1	Efficient High Utility Pattern Mining with Multiple Thresholds: A Single-Scan Approach	Ye-In Chang, Jun-Hong Shen and Xin-Wei Li
2	Docking-Then-Assembling of Two Nucleotide Pairs for Designing the DNA Aptamer Targeting Interleukin 17A	Wen-Pin Hu , Pei-Tzu Lan and Wei-Cian Yan
3	Short-term Traffic Flow Prediction Based on Deep learning Approach with Inter-day and Intra-day Strategies	Hsu Lin and Mu-Yen Chen
4	Solar Irradiance Forecasting Based on Signal Decomposition with Deep Learning Models	Po-Han Chen and Mu-Yen Chen
5	Exploring Higher Education Students' influence factors on the Acceptance Intention of ChatGPT: A Study Based on the AIDUA Model	Jie Wen Justina Ting, Ying Geng, Po-Sen Huang and Pei-Hsuan Lin

Date: July 9, 2024 (Tuesday)

西九館 コラボレーションルーム 1 (PM 16:00 – 17:00)

Session Chair (B12)

No.	Paper Title	Authors
1	Development and Implementation of a Hierarchical Asynchronous Federated Learning Architecture	Yen-Ching Chang, Sheng-Hsiang Liao, Shih-Hsin Huang and Chin-Feng Lai
2	Personalized Federated Learning: A Solution for Non-IID Challenges in DDoS Detection	Wei-Che Chien
3	6G Cross-Disciplinary Application Scenario Demonstration	Chin-Feng Lai
4	Research on AI Model of Crowd Counting for Site Security	Chin-Feng Lai

Date: July 9, 2024 (Tuesday)

西九館 コラボレーションルーム 2 (PM 16:00 – 17:00)		
Session Chair (B13)		
No.	Paper Title	Authors
1	Development and Evaluation of Information Security Literacy Curriculum Based on Serious Games	Chin-Hsien Chu, Ya-Tzu Chen, Ying-Hsun Lai, Chin-Feng La and Shih-Yeh Chen
2	Virtual Reality Integration with Injury Classification in Mass Casualty Scenarios Development	Cheng-Yu Lin, Li-Sung Yang, Ying-Hsun Lai, Chin-Feng Lai and Shih-Yeh Chen
3	Gather Town Virtual Learning Spaces in the Programming Course: Exploring the impact of the Technology Acceptance Model (TAM)	Hua-Xu Zhong, Jui-Hung Chang, Chin-Feng Lai, Patrick C. K. Hung and I-Hua Wang
4	Exploring Computational Thinking and Cognitive Load through Design-Centric Internet of Things Education	Yi-Ting Liou, Chia-Wei Liu, Yao-Chung Chang, Yu-Shan Lin and Ying-Hsun Lai

Date: July 9, 2024 (Tuesday)

館前會館 小會議室 3 (3 階) (PM 16:00 – 17:00)		
Session Chair (B14)		
Prof. Shu-Ming Wang wsm6@faculty.pccu.edu.tw		
No.	Paper Title	Authors
1	A Bibliometric Analysis of Cybersecurity Awareness Education: Current Trends and Future Directions	Shu-Ming Wang
2	Early Prediction of Academic Article Lifecycle Models Based on Multimodal Architecture	Chia-Ling Chang, Yi-Lung Lin and Yi-Hung Liu
3	Smart AI Hometown Project-Coastline Environment Quality Testing Benefit Assessment with AiRgo: Taking the Northern Coast of Tamsui, Taiwan as an Example	Yi-Lung Lin and Chia-Ling Chang
4	Leveraging a Virtual Investment Game to Diagnose Investor Behavioral Biases	Hui-Chen Lin, Yu - Chen Pan, Ping-Kuan Liu and Tsung-Ju Lee

Session Information

July 10, 2024 (Wednesday)				
Time	Content			
10:00~10:30	Registration			
10:00~12:00	ISASD 2024			
	Session C1	Session C2	Session C3	Session C4
12:00~13:00	Lunch			
13:00~15:00	ISASD 2024			
	Session C5	Session C6	Session C7	Session C8
15:00~16:00	ISASD 2024			
	Session C9			

Date: July 10, 2024 (Wednesday)

館前會館 小會議室 2 (3 階) (AM 10:00 – 12:00)		
Session Chair (C1)		
Prof. Yi-Maun Subeq eliyimch@nutc.edu.tw		
No.	Paper Title	Authors
1	Augmented Reality in Cultural Care for Indigenous Long-term Care Staff for Fall Prevention	Yi-Maun Subeq and Yen-Ju Chen
2	The correlation between Retaining Rate and Nursing Staff After COVID-19	Cian-Huei Shih, Chen Pei-Chi and Yi-Maun Subeq
3	Effectiveness of Fall Prevention Intervention in Culturally Appropriate Delayed Disability for Indigenous Elderly	Hsiu-Lan Kung and Yi-Maun Subeq
4	Health Literacy and Using Cultural Congruence on Foot Self-Care Educational Intervention for Indigenous Diabetes Cases	Shu-Chin Lin and Yi-Maun Subeq
5	Integration of Traditional Indigenous Medicine and Modern Healthcare Systems in Taiwan	Maiya Balalavi
6	Exploring Work Stress, Job Satisfaction, and Related Factors of Psychiatric Nurse Practitioners	Chiu-Lien Lin, Kuei-Ying Wang and Yohana Yobelina
7	Developing a Mobile Learning and Tour-guiding System based on Generative AI Approach	Fu-Kai Kuo and Mu-Yen Chen

Date: July 10, 2024 (Wednesday)

西九館 コラボレーションルーム 1 (AM 10:00 – 12:00)		
Session Chair (C2) Cheng-Sheng Lin sheng8876@nfu.edu.tw		
No.	Paper Title	Authors
1	AI Marketing Strategy and Consumer Behavior Analysis in Retail Industry	Ching-Hsueh Wang, Chung-Yi Chiou and Cheng-Sheng Lin
2	Analysis of Operating Efficiency of Online Shopping Malls Combined with AI Smart Logistics	Cheng-Sheng Lin and Kuei-Mei Cheng
3	Analysis of the Operating Efficiency of Greenhouse Farms under AI Automation Technology	Cheng-Sheng Lin
4	Business Strategy Analysis of Smart Logistics with AI Automatic Picking	Chin-Shyang Shyu and Cheng-Sheng Lin
5	Digital Marketing and Customer Value Analysis of the National Farmers and Fisheries Association Online Mall	Jian-Guo Bau and Cheng-Sheng Lin
6	Artificial Intelligence in the Agritourism Farms: An Overview of Reviews	Chin-Shyang Shyu
7	Digital Marketing and Customer Behavior Analysis in the Insurance Industry	Cheng-Sheng Lin and Chin-Shyang Shyu
8	Analysis of the Operating Efficiency of Unmanned Banks Using AI Intelligent Management Systems	Cheng-Sheng Lin and Chin-Shyang Shyu

Date: July 10, 2024 (Wednesday)

西九館 コラボレーションルーム 2 (AM 10:30 – 12:00)		
Session Chair (C3) Prof. Chao-Tung Yang ctyang@thu.edu.tw		
No.	Paper Title	Authors
1	On Construction of IoT Service for Air Quality and Water Quality Monitoring and Analysis on NB-IoT	Tsai-Chen Yang, Yun-Chen Yang, Yin-Tzu Huang, Tzer-Shyong Chen and Yu-Fang Chung
2	The Application of Artificial Intelligence in Healthcare and Hospital Management	Hsi-Jen Chen, Chia-Chu Chang, Cheng-Chieh Lin and Chao-Tung Yang
3	Exploration of Human-Computer Interaction and Emotional Experience under Artificial Intelligence Virtual Companion Technology	Fang-Kun Kuo and Shun Nain Luo
4	Federated Learning with Class-weighted Aggregation Enhanced by Parameters' Scale	Shu-Wei Huang, Teng-Yuan Tsou and Mu-Yen Chen
5	Federated Learning with Weighted Aggregation Enhanced by MLP	Shu-Wei Huang and Mu-Yen Chen
6	Suicide Prevention Mobile APP Based on Lifestyle, Circumstances and Medical Information	Dai-Lun Chiang, Ming-Han Ho, I-Hsien Chen, Ying

Program Guide

ISASD 2024

		Lin, Shu-I Wu and Fei- Pei Lai
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Date: July 10, 2024 (Wednesday)

館前會館 小會議室 3 (3 階) (AM 10:00 – 12:00)		
Session Chair (C4)		
Guan-Jie Lien 810432006@gms.ndhu.edu.tw		
No.	Paper Title	Authors
1	The Impact of Online and Offline Financial Advisory Services on Customer Relationships, Satisfaction, and Performance: A Study in the Banking Industry	Silvia Wan-Ju Liang, Ting-Yu Liang and Tung-Ying Kuo
2	A Study on Low-Carbon Transformation Strategies for Hotels Driven by Digital Innovation	Guan-Jie Lien and Kuo-Cheng Chung
3	Value Co-Creation in Tourism Industry: Sharing Economy and Innovative Business Models	Guan-Jie Lien and Jun-Ren Wang
4	A Study on the OMO Model for the Sustainable Development of Tourism Destinations	Guan-Jie Lien and Yi-Ju Lee
5	Exploring the Impact of Social Media on the Awareness and Attractiveness of Small Tourism Destinations	Yi-Ju Lee and Guan-Jie Lien
6	Orchestrating Agile Omnichannel Supply Chain Planning with End-to-end Information Visibility	Cheng-Hsien Hsieh, Ting Kai Ooi, Yu-Kai Huang and Shu-Mei Wang
7	Cross-Domain Skin Scar Classification based on Transfer Learning Approach	Wei-Chi Chung and Mu-Yen Chen

Date: July 10, 2024 (Wednesday)

館前會館 小會議室 2 (3 階) (PM 13:00 – 15:00)

Session Chair (C5)

Jeu-Jiun Hu jjhu@nttu.edu.tw

No.	Paper Title	Authors
1	A Study on the Digital Teaching Competence of Elementary School Teachers in Kaohsiung City	Wei-Lin Sun, Jia-Rong Wen, Shing-Hwang Doong and Jeu-Jiun Hu
2	A Study on the Impact of Tablet Computer-Assisted Instruction on the Mandarin Learning Achievement of Fifth Grade Elementary School Students	Qian-yu Li, Jeu-Jiun Hu, Ming-Hsiung Hsiao and Pi-Yun Chen
3	A Study on Quality Improvement Strategies for Semiconductor Equipment Maintenance	Hsu-Po Hsiung, Jia-rong Wen, Shing-Hwang Doong and Jeu-Jiun Hu
4	The Impact of Integrating Information Technology into Physical Education Instruction on the Physical Fitness Performance of Sixth Grade Students	Chen-Chi Hsu, Jeu-Jiun Hu, Shing-Hwang Doong and Pi-Yun Chen
5	Autonomous Drone Urban Navigation by Using Convolutional Neural Network	Chao-Yang Lee
6	Precision Medicine Hospital Drug Cart Drug Image Recognition System Research and Development Plan	Eric Kin-Lap Lee
7	Immersive Technology in Healthcare Education for Acceptance: Objective Structured Clinical Examination	Pei-yi Lin, Eric Kin-Lap Lee and Kuo-Wei Su

Date: July 10, 2024 (Wednesday)

西九館 コラボレーションルーム 1 (PM 13:00 – 15:00)		
Session Chair (C6) Chao-Hung Chiang irenechiang77@gmail.com		
No.	Paper Title	Authors
1	Study on Acceptance of Technological Support for Customs Clearance in Cross-Border E-commerce	Chao-Hung Chiang
2	Study on the Use of Automated Equipment in Air Cargo Operations	Chao-Hung Chiang
3	Resilience of Air Cargo Networks: A Case Study of Taiwan	Chao-Hung Chiang
4	A Study on the Selection of Offshore Wind Port Networks	Chao-Hung Chiang
5	Exploring Factors Affecting the Resilience of Air Cargo	Chao-Hung Chiang

Date: July 10, 2024 (Wednesday)

西九館 コラボレーションルーム 2 (PM 13:00 – 15:00)

Session Chair (C7)

Yung-Cheng Yao yuchyao@nkust.edu.tw

No.	Paper Title	Authors
1	Development of an Automated Material Handling Vehicle for Factory Automation Using Image Recognition	Lie Yang, Chien-Erh Weng, Shao- Hau Hsu, Yi- Jay Zeng, Shan-Teng Tu, Pang-Fu Wang and Yung-Cheng Yao
2	Design of Smart Night Light Device Based on Gesture Recognition Technology	Lie Yang, Chien-Erh Weng, Shao- Hau Hsu, Tzu-Ta Lo, Chia-Hsien Chang, Yuan- Shuo Chen and Yung- Cheng Yao
3	A Child Safety Solution Based on Image Recognition and Cloud Data	Yung-Cheng Yao, Chung- Han Lu, Yun- Heng Yang, Shih-Jyun Cai and Wei-Hao Wong
4	A Smart Cane for Home Care Based on Oximeter and Fall Detection	Yung-Cheng Yao and Shang-An Wang

Date: July 10, 2024 (Wednesday)

館前會館 小會議室 3 (3 階) (PM 13:00 – 15:00)

Session Chair (C8)

Hsin-Te Wu wuhsinte@nttu.edu.tw

No.	Paper Title	Authors
1	Building a Healthcare Insurance File Exchange System Based on Blockchain Technology	Hsien-Cheng Liao, Mu-Yen Chen and Hsin-Te Wu
2	Establish Omnipresent Internet of Behaviors Environment Aids Created based on the Educational Philosophy of STEM	Yao-Chung Chang, Chih-Chiang Lee and Hsin-Te Wu
3	Constructing Ship Safety Protection System Based on Smart Ships	Meng Hsuan Wu and Hsin-Te Wu

Date: July 10, 2024 (Wednesday)

西九館 コラボレーションルーム 2 (PM 15:00 – 16:00)

Session Chair (C9)

No.	Paper Title	Authors
1	Constructing Test Cases and Evaluation Mechanism for Trading Strategies	You Zhen Lai, Nien Tzu Kuo, Xin Wang and Tsung-Ju Lee
2	Harnessing Artificial Intelligence for Sentiment Analysis in Financial Communities: A Contrarian Trading Strategy Utilizing GPT Model	Yi-Ching Hsieh, Kuan- Wei Chiu and Li-Jiun Chen
3	Assessment of Carbon Sequestration Value Based on Forest Fire Incidents	Jing-Ting Su, Kai-Xian Chen and Li- Jiun Chen

Session Information

July 11, 2024 (Thursday)	
Time	Content
10:00~10:30	Registration
10:30~12:00	ISASD 2024
	Session D1
12:00~13:00	Lunch
13:30~15:00	ISASD 2024
	Session D2
15:30~17:00	ISASD 2024
	Special Section

Date: July 11, 2024 (Thursday)

館前會館 小會議室 2 (3 階) (AM 10:30 – 12:00)

Session Chair (D1)

Prof. Chih-Chao Chung ccchung@ntin.edu.tw

No.	Paper Title	Authors
1	Impact of ESG Performance on Green Technology Innovation: Evidence from Heavily Polluting Industries	Weixing Xu, Susu Wang and Hezhong Jiang
2	Loss of Control: The Algorithm-based Decision-making Induces Negative Company Appraisal	Zhaohan Xie and Yining Yu
3	Literature Insights through Topic Modeling: AI Applications in Municipal Solid Waste Management in Smart Cities	Chien-Liang Lin, Kuo-Ti Liao and Shou-Hsi Tu
4	Will Corporate Green Innovation Influence Investor Behavior? - Empirical Analysis Based on Panel Data of Listed Companies	Minghua Han, Xubin Miao and Jiarong Zheng

Date: July 11, 2024 (Thursday)

館前會館 小會議室 1 (2階) (PM 13:30 – 15:00)

Session Chair (D2)

Prof. Chien-Liang Lin hciwu@mail.mcu.edu.tw

No.	Paper Title	Authors
1	Applying LINE-based Programming Instructional System to Explore Student Learning Effectiveness in Programming Education	Ya-Ping Hong, Jou-An Chen and Yu-Sheng Su
2	The Impact of Virtual Reality Technology in Metaverse on the Learning Effectiveness and Learning Behavior of Chemistry Education	Xin-Yi Huang, Bing-Yang Shiu, Wen-Ling Tseng and Yu-Sheng Su
3	Phi-2 Small Language Model Applied in Front-End Web Automation - Using HTML5 as an Example	Tang-Ching Hung, Ching-Teng Lo and Yu-Sheng Su
4	Enhancing Computational Thinking Classification Effectiveness Using Generative Artificial Intelligence	Jun-How Pang, Jou-An Chen and Yu-Sheng Su