

# **Conference Program**

## **16<sup>th</sup> IIAI International Congress on Advanced Applied Informatics**

**July 6-12, 2024, Takamatsu Japan**



**Venue: Sunport Takamatsu & Kawata International Conference Center, Takamatsu, Japan**

## **July 6 (Sat) 1:30PM-5:00PM**

### **Room Foyer**

Registration and Welcome Beverage

## **July 6 (Sat) 2:30PM-5:00PM**

### **Room International Conference Center SCAI-SS1-1**

Session Co-Chairs: Masanori Hirano (Preferred Networks, Inc.), Kei Nakagawa (Nomura Asset Management Co, Ltd.), Yoshiyuki Suimon (Nomura Securities Co., Ltd.), Hiroki Sakaji (Hokkaido University)

Automatic generation of patent maps by estimating technical problems and solutions using T5

*Yuki Kobori, Hiroyuki Sakai and Kengo Enami*

Does executive compensation with ESG target improve firm's ESG performance?

-Evidence from Japan

*Dai Yamawaki, Kaito Takano and Kei Nakagawa*

Construction of Domain-specified Japanese Large Language Model for Finance through Continual Pre-training

*Masanori Hirano and Kentaro Imajo*

DDSTM:Dynamic Dual Sparse Topic Model using Spike and Slab priors

*Tatsuki Masuda, Kei Nakagawa and Takahiro Hoshino*

Bayesian Analysis of Stochastic Conditional Duration Models with Intraday and Intra-deferred Future Seasonalities in High-frequency Commodity Market

*Tomoki Toyabe, Makoto Nakakita and Teruo Nakatsuma*

### **Room 64 DSIR 1**

Session Chair: Naruhiko Shiratori (Tokyo City University)

Evaluating the Effects of Pre-University Education Using Propensity Score Matching

*Keita Nishiyama*

Assessment of Study Abroad Programs as Co-Curricular Program: A Case Study of Measuring Global Competency with the MGUDS-S

*Soichiro Aihara*

Understanding ORCID Adoption Among Academic Researchers

*Stephen Porter, Paul Umbach and Chris Willis*

Current Status and Issues Concerning the Formulation and Operation of Mid-Term Plans for Japanese National Universities - Based on the Results of a Questionnaire Survey

*Tetsuya Oishi, Eiichi Takata, Masao Mori, Kunihiko Takamatsu, Takahiro Seki and Kahori Ogashiwa*

**Room 65 LTLE 1 + LTLE-SS2**

Session Co-Chairs: Kouseke Mouri (Hiroshima City University) and Yin Chengjiu (Kyushu University)

Detecting outliers from quiz response times and scores by classifying weekly learning patterns in a blended learning course

*Konomu Dobashi*

**4:45PM-5:45PM      Ice-cold Beer and Beverage Greeting at Foyer**

**July 7 (Sun) 9:45AM-11:50AM**

**Room International Conference Center SCAI-SS1-2**

Session Co-Chairs: Masanori Hirano (Preferred Networks, Inc.), Kei Nakagawa (Nomura Asset Management Co, Ltd.), Yoshiyuki Suimon (Nomura Securities Co., Ltd.), Hiroki Sakaji (Hokkaido University)

Analysis of the Temporal Structure in Economic Condition Assessments

*Masahiro Kato*

Error Analysis of Option Pricing via Deep PDE Solvers: Empirical Study

*Rawin Assabumrungrat, Kentaro Minami and Masanori Hirano*

Analysis of investment behavior of individual investors in the FX market: Influence of FOMC and Beige Book information

*Moeko Asano, Yoshihiko Ichikawa, Kei Nakagawa and Kaito Takano*

Optimal execution strategy using Deep Q-Network with heuristics policy

*Tatsuyoshi Ogawa, Kei Nakagawa and Kokoro Ikeda*

Measuring Semantic Similarity in Japanese Key Audit Matters

*Nobushige Doi, Yusuke Nobuta and Takeshi Mizuno*

**Room 62 DSTM 1 + DSTM-SS2**

Session Co-Chairs: Morihiko Ikemizu (Advanced Institute for Industrial Technology) and Takaaki Hosoda (Advanced Institute of Industrial Technology)

A Study of the Effect of Age on Employee Engagement

*Morihiko Ikemizu and Takaaki Hosoda*

I Can See Your Voice! Analyzing Public Opinions on Urban Issues in Thailand's Khon Kaen Municipality Through Social Media

*Prasongchai Setthasuravich, Grichawat Lowatcharin, Pakpoom Phonsungnoen, Kasipat Thonmanee, Pathompohn Mangma, Krisada Prachumrasee and Panpun Ronghanam*

Extracting Impression from the Low-Rated Statements Posted at EC Sites

*Yuya Yokoyama, Takaaki Hosoda and Tokuro Matsuo*

Data Usage Prediction with LSTM on Customized Firmware 5G OpenWRT Modem Router

*Alexander Nurenie, Widodo Budiharto, Ford Lumban Gaol and Aditya Kurniawan*

Research on Behavioral Characteristics of Entrepreneurs

*Katsuki Yasuoka, Takaaki Hosoda, Kiyomi Miyoshi, Takuro Matsuo and Qiang Ma*

**Room 63 DSIR-SS2 + DSIR-SS4**

Session Co-Chairs: Naruhiko Shiratori (Tokyo City University) and Shuntaro Iseri (Kanda University of International Studies) and Shintaro Tajiri (Hokuriku University)

A Study on Real-Time Prediction of Course Dropout Students Using LMS Logs

*Takaaki Ohkawauchi and Eriko Tanaka*

Identifying the high risk duration to the semester to drop out of college using dropout probability

*Naruhiko Shiratori*

Analysis of Discrepancies in Learning Awareness of Data Science Across Disciplines - a Case Study of Nihon University, College of Humanities and Sciences –

*Eriko Tanaka and Takaaki Ohkawauchi*

Designing Data Science Courses to Support Non-STEM Undergraduate Students -  
Insights Based on Expectancy-Value Theory

*Mio Tsubakimoto*

Integrating Tableau into a First-Year Information Literacy Course: A Practical  
Approach to Enhancing Data Science Education

*Shintaro Tajiri, Kunihiko Takamatsu, Naruhiko Shiartori, Tetsuya Oishi, Masao Mori  
and Masao Murota*

### **Room 64 DSTM-SS1**

Session Chair: Takaaki Hosoda (Advanced Institute of Industrial Technology)

Community Settlement of Migrant Entrepreneurs: Case study of "Sakawa Invention  
Lab"

*Osamu Nakajima*

Analysis of Factors Influencing the Decision-Making of the Elderly

*Eriko Musashi, Takaaki Hosoda and Daisuke Ikeda*

### **July 7 (Sun) 1:15PM-2:30PM**

#### **Room International Conference Center SCAI 1 and SCAI-SS1-3**

Session Co-Chairs: Masanori Hirano (Preferred Networks, Inc.), Kei Nakagawa  
(Nomura Asset Management Co, Ltd.), Yoshiyuki Suimon (Nomura Securities Co.,  
Ltd.), Hiroki Sakaji (Hokkaido University)

Bayesian Portfolio Optimization by Predictive Synthesis

*Masahiro Kato, Hibiki Kaibuchi, Kentaro Baba and Ryo Inokuchi*

Integrating Textual and Financial Time Series Data for Enhanced Forecasting

*Shangyang Mou, Qiang Xue, Wenting Zhang, Takuji Kinkyō, Shigeyuki Hamori, Jinhui  
Chen, Tetsuya Takiguchi and Yasuo Ariki*

Game Recommendation based on Reviews and Neighbor Interaction with Generative  
Adversarial Networks

*Duen-Ren Liu, Bo-Yi Pei and Jian-Heng Chen*

### **Room 62 BMOT 1**

Session Chair: Shimpei Matsumoto (Hiroshima Institute of Technology)

Proposal of a Tourist Attractions' Introduction Creating Tool using Deep *Learning*  
*Takashi Hasuike, Youheng Liang, Hideki Katagiri and Hiroshi Tsuda*

Research on the Color Schemes of Event Announcement Images Using GMM  
*Kayu Morishige and Shimpei Matsumoto*

Predicting Success Factors in Social Issue Crowdfunding Projects Using A Logistic  
Regression Analysis

*Kazuki Munehisa and Shimpei Matsumoto*

### **Room 63 DSIR 2**

Session Chair: Naruhiko Shiratori (Tokyo City University)

Enhancing Moodle Insights: Leveraging Time Tracking Data Beyond Access Counts  
*Yuji Kobayashi and Takashi Miyaura*

A Survey on Self-Perception of Institutional Research Skills and Knowledge by  
Focusing on the Gap with the Participants Needs of Training Courses

*Tetsuya Oishi and Takashi Nishide*

### **July 7 (Sun) 2:45PM-4:50PM**

#### **Room International Conference Center SCAI 2**

Session Chair: Takafumi Nakanishi (Musashino University)

Dataset Construction and Verification for Detecting Factual Inconsistency in Japanese  
Summarization

*Keisuke Iwamoto and Kazutaka Shimada*

A Simple Method to Improve Contrastive Learning for Defect Recognition with a Small  
Dataset

*Hirohisa Kato and Fusaomi Nagata*

Cloud-based Acute Kidney Injury and Mortality Prediction System with Machine  
Learning Hyperparameter Tuning Service

*Kai-Ching Chen, Mei-Ya Nian, Hsin-Yu Lee, Yi-Lun Pan and Kai-Chih Pai*

Model for Trust and Reliance on Technology: Exploring the Relationship between  
Trustor, Trustee, and Context

*Takashi Matsuura and Seiko Shirasaka*

### **Room 62 BMOT2**

Session Chair: Hidekazu Iwamoto (Josai International University)

Research on Improving Usability of Smartphone Applications through User Interface Design Theory and Eye Tracking

*Nozomi Fujiwara and Shimpei Matsumoto*

Numerical computation of the SEIR model taking into account variations in contact rates due to diurnal human mobility

*Hiroyoshi Matsumoto, Yusuke Yamauchi and Shimpei Matsumoto*

Research on Improving Usability of Smartphone Applications through User Interface Design Theory and Eye Tracking

*Nozomi Fujiwara and Shimpei Matsumoto*

### **Room 63 ESKM 1**

Session Chair: Daisuke Ikeda (Kyushu University)

A Social Recommendation Mechanism for Esports Team up

*Chin-Yu Hsieh, Jyh-Hwa Liou and Yung-Ming Li*

Designing a Probability Disclosure Mechanism for Loot Boxes Based on Consortium Blockchain

*Yu-Hsi Ni and Yung-Ming Li*

Retrieval Augmented Generation on Hybrid Cloud: A New Architecture for Knowledge Base Systems

*Chia-Chuan Chuang and Kai-Ching Chen*

**5:00PM-6:00PM      Welcome Beverage & Cocktail at Foyer**

**July 8 (Mon) 9:45AM-11:50AM**

**Room International Conference Center SCAI 3**

Session Chair: Takafumi Nakanishi (Musashino University)

Ray-Transformer Neural Radiance Field for Novel 3D View Synthesis from Single Image

*Tsung-Min Yu and Yi-Leh Wu*

Gated Convolutional Attention Networks for Predicting Adverse Birth Outcomes

*Daniel Asfaw, Ivan Jordanov, Lawrence Impey, Ana Namburete, Raymond Lee and Antoniya Georgieva*

Utilizing SAX for Enhanced Recognition of Finger Characters: A Continuous and Transitional Approach in Sign Language

*Shinpei Hagimoto, Virach Sornlertlamvanich and Takafumi Nakanishi*

Toward an Acceptable Dynamic Allocation Considering Fairness on Autonomous Car Parking

*Suma Saathvika Duddela and Naoki Fukuta*

### **Room 62 BMOT 3**

Session Chair: Shimpei Matsumoto (Hiroshima Institute of Technology)

Empirical Analysis on the Interaction between Corporate Dynamics, Cultural Context and Economic Growth

*Yuji Tou and Akira Nagamatsu*

Understanding Convention Attendees' motivations in the Post-COVID Era: A Comparative Study of Foreign and Japanese Participants

*Hidekazu Iwamoto and Tokuro Matsuo*

Visualizing Network Relationships in Tourism: A Methodological Approach to Value Creation with Practical Application

*Nozomi Saito, Lisa Ruhanen, Koki Kusano and Seiko Shirasaka*

### **Room 63 IDDC 1**

Session Co-Chairs: Taishi Nemoto (University of Kochi)

Proposal of Food Design Methods in the Age of Recipe 3.0

*Mutsumi Kodama and Taishi Nemoto*

An Analysis of Changes in the Awareness of the Teacher Who Supported to Elementary School Students the Utilization for the First Time of 1:1 Information Devices

*Mitsuhiro Watanabe and Tatsuya Horita*



### **Room 64 DSIR-SS1**

Session Chair: Yoshikazu Asada (Jichi Medical University)

A Trial to Convert Graduation Competency Questionnaire Data into Key Performance Index in Japanese Medical Schools

*Koji Tsunekawa, Masako Kakizaki and Osamu Takakuwa*

Learning objectives from the syllabus and Model Core Curriculum for medical education in Japan: A case report of mapping

*Yoshikazu Asada*

**1:15PM- 1:40PM      Opening Ceremony at Int'l Conf. Center**

**1:40PM-2:20PM      Ice-Break Talk & Welcome Attraction**

### **July 8 (Mon) 2:30PM-4:10PM**

#### **Room International Conference Center SCAI 4**

Session Chair: Takafumi Nakanishi (Musashino University)

Investigation of the Diversity of News Reading Articles and Browsing Trends Using Sentence-BERT

*Akihisa Takiguchi, Tsunenori Mine and Yutaka Arakawa*

Application of Skeleton Image Detection in Basketball Free Throw Posture Research

*Jui-Che Hsu and Ming-Hsiang Su*

Evaluating Patient Satisfaction Through Validated Predictive Classification Models

*Nittaya Chemkomnerd, Warut Pannakkong, Van-Nam Huynh and Tanatorn Tanantong*

#### **Room 62 BMOT 4**

Session Chair: Hidekazu Iwamoto (Josai International University)

Decoding Scheme Considering Differences in Operator Ability for Dual Resource-Constrained Scheduling Problem

*Makoto Kimura, Aya Ishigaki and Nari Tanabe*

Dynamic Capability of SMEs under Exogenous Crises: A Case Study of SMEs Faced with COVID-19

*Kazuhisa Nakano and Naoshi Uchihira*

**Room 63 SBIT-SS1**

Session Chair: Hiroyuki Ono (Chiba Institute of Technology)

Statistical Analysis of the Influence of Service Quality on Customer Satisfaction of Information System Development

*Atsushi Shimoda and Kentaro Ichimura*

A Study on Station Power Model Index Utilizing Train Conversion Factors for Lines Serving Tokyo Prefecture.

*Yohei Hara and Hiroyuki Ono*

Changes that basic income can produce depending on economic conditions

*Kosei Takashima and Isao Yagi*

A Consideration of Analyzing the Impact of Influencer Flames

*Masaki Shibuya, Motoi Iwashita and Ken Nishimatsu*

**4:10PM-4:40PM      Keynote Address**

**Room International Conference Center**

Session Chair: Naruhiko Shiratori (Tokyo City University) and Kunihiro Takamatsu (Tokyo Institute of Technology)

Tentative Title: Institutional Research in UK Higher Education: Insights from the HEIR Network and the University of St Andrews

*Gerald Prescott (University of St. Andrews)*

**Abstract**

Institutional Research (IR) has evolved into a recognised practice over the last 60 years, with its foundations reaching far back into the histories of European Universities. IR as a discipline originates from institutions in the United States and Canada and at its core involves objective, systematic and thorough research that supports institutional, planning, policy formation, and decision making. IR is now playing an increasingly important role within many Higher Education institutions, enhancing learning and teaching practice and providing timely and relevant evidence to aid management decision making.

During this lecture, we will explore the IR approach through the lens of the UK and Ireland Higher Education Institutional Research (HEIR) network and by reflecting upon current IR priorities within the UK Higher Education sector. Using case studies from the University of St Andrews we will explore how IR permits us to understand and make decisions on institution-wide education practice in the context of local, national and international drivers for change. The case studies presented will demonstrate how institutional evidence has enabled us, to understand the relationship between an increase in the cost of living and student engagement, mental health and academic integrity and, to identify attainment gaps across student cohorts of different demographics, including gender, disability and social background.

### **Bio**

Gerald Prescott is the Associate Dean for Education (Science) at the University of St Andrews, Scotland and a member of the Planning Group for the UK & Ireland Higher Education Institutional Research (HEIR) network. Gerald is an experienced educator and strategic leader in teaching and learning change and enhancement nationally and internationally. He leads strategic change as well as serving on senior institutional committees and national and international groups, including representing Universities Scotland on strategic, sector-wide, assessment groups, leading a sector-wide thematic group on Generative AI in the curriculum and undertaking work on institutional wellbeing for the European University Association.

**5:00PM-7:00PM      Welcome Reception and Poster Session at #61**

### **July 8 (Mon) 5:00PM-7:00PM**

#### **Room 61 Welcome Reception and Poster Session**

Session Co-Chairs: Daisuke Ikeda (Kyushu University), Yuichi Ono (University of Tsukuba), Naruhiko Shiratori (Tokyo City University), Takafumi Nakanishi (Musashino University), Shimpei Matsumoto (Hiroshima Institute of Technology), Hidekazu Iwamoto (Josai International University), Yukihiro Shintani (Chiba Institute of Technology), Taishi Nemoto (University of Kochi) and Takaaki Hosoda (Advanced Institute of Industrial Technology)

### **ESKM Posters**

Investigating Smart Retail Stores Adoption: An MOA Theoretical Perspective

*Chih-Jou Chen, Ju-Chuan Wu and Cheng-You Tsai*

A System for Exploring People on the Web Using Subject Headings

*Yoshitaka Shirakawa, Masayuki Shimokura, Takashi Hirata and Harumi Murakami*

### **LTLE Posters**

Development of virtual space for individualized and optimal learning

*Keiya Maruko, Shengkai Lin, Kousuke Mouri, Masaru Okamoto and Yukihiro Matubara*

Investigating the Influence of Competencies and Attitudes Nurtured through K-12 Education on Student Performance in Scrum-based System Development of Project Based Learning

*Shun Sato and Hiroto Yamakawa*

Preliminary Evaluation of a Hotel English Virtual Reality Educational Game with Scenario-based Audio Feedback

*Yu-Ching Kao and Huei Tse Hou*

Changes and Trends in High School Students' Awareness of Information Ethics Following a Lecture on Information Ethics

*Sakiko Sumai, Norio Ishii, Yuri Suzuki and Ryo Miyazaki*

Design and Preliminary Evaluation of a Simulated Interview Educational Game Combined with Dynamic Situation Path Mechanisms

*Yen-Ting Ho, Yu-Cheng Lin, Pei-Ching Ngu and Huei-Tse Hou*

The Effects of Non-Violent Communication-based Emotional Education using a Digital Storytelling Platform on Adolescents' Emotional Learning: Gender differences

*Hsiu-Ling Chen and Szu-Yu Chen*

A Preliminary Study of Augmented Reality Educational Board Game Integrated with Sequence-based Cognitive Scaffolding for Learning Occupational Characteristics and Evolution

*Cheng-Tai Li, Yu-Ju Huang, Chia-Hsuan Huang, Chi-Chin Hsueh, Chieh-Yu Li and Huei Tse Hou*

Game-Based Learning in Taiwanese Science Education: Current Practices and Future Potentials

*Mingfong Jan, Tieh-Huai Chang and Kuo-Yang Chiu*

Impression Evaluation of Instructor Placement in Online Lecture Screen Displays

*Kaili Zhu, Katsumi Sato and Yoko Usui*

The Impact of Avatar Customization Flexibility on Conversational Satisfaction

*Katsumi Sato and Yoko Usui*

Using an online knowledge-construction platform to explore Collaborative inquiry activities of problem-based learning

*Yenlin Chiu*

Development of a Learning Advising System using Generative AI

*Haruki Ueno, Yasuomi Takano, Kana Sunahara, Ginji Someya, Taketo Tsurube and Hiroshi Komatsugawa*

Design a hierarchy Contextual Clue Scaffolding oriented Educational Board Game with Mobile Technology for Understanding Basic Health Care Knowledge

*Cheng-Tai Li, Chih-Yung Chien, Lu-An Chen, Li-Fang Yin, Jie-Yun Cheng, Zhuang-Hua Gan and Huei Tse Hou*

Building Cloud Base Cyber Range by Designing an Efficient Container Distribution API Using Docker

*Sanggyu Shin*

Preservice Teachers' Design Experiences of Educational Game

*Wan-Lin Yang*

An Interactive Picture Storybook Scheme for Lower-Grade Elementary Students to Learn Music and Computational Thinking

*Jun-Ming Su*

A Virtual 3D Chemistry Laboratory with an Enhanced AI Chatbot to Facilitate Learning Effectiveness

*Bo-Jing Chen, Chih-Ming Chen and Chieh-Ling Huang*

Design and Evaluation of the Framework of ChatGPT-based situational non-player character scaffolding for educational games

*Yu-Chi Chen and Huei Tse Hou*

Design of Creative Thinking Skills Training Activity using Board Game with Mobile technology

*Shi-Chian Wang, Yu-Chi Chen, Pei-Chun Chung and Huei Tse Hou*

An Educational Simulation Game Integrated with Generative AI as Conversational Contextual Scaffolding for Tourism English: A Preliminary Analysis of Learning Achievement, Self-Efficacy and Cognitive Load

*Cheng-Tai Li, Liang-Hsuan Lee and Huei Tse Hou*

### **DSIR Posters**

Context-sensitive Classification for Scientific Keywords in Grant Reports

*Michiko Yasukawa and Koichi Yamazaki*

Consistency of the I-E-O-L Model and the Guidelines for Academic Management -  
Revisiting the Extended I-E-O Model for Student Survey Management -

*Sayaka Matsumoto, Kunihiko Takamatsu, Shotaro Imai, Tsunenori Inakura and Masao Mori*

Development of a convenient hearing test system for the prevention of frailty

*Mari Ueda, Kodai Odagiri and Testuo Tanaka*

Comparative analysis of high and low performers' behavior from research topic exploration to research outreach

*Kaoru Matsumoto and Masao Mori*

### **SCAI Posters**

Toward an Efficient And Resilient Electric Vehicle Charging Place Allocation Using Multiagent Approach

*Iftekhhar Ahamad and Naoki Fukuta*

Simulation of pedestrian crowds using probability value cellular automata

*Yasuki Iizuka*

Enhance the Image Recognition Capabilities of Drones in Low-Light Environments

*Ching-Min Lee, Yan-Liang Pan, Chun-Hsiang Chuang and Sheng-Guan Zhang*

Multiparty Quantum Key Agreement Protocol Based on 2-qubit Grover Search with swapping

*Tzung-Her Chen*

Machine Learning Detection of Hemodialysis Arteriovenous Graft Stenosis Using Bilateral Pulse Oximetry

*Jeen-Shing Wang, Yen-Lung Tsai and Jui-Chih Chang*

Extraction of emotional patterns in novels and analysis of their transitions

*Masako Furukawa and Yoshitomo Yaginuma*

Development of an Indigenous Language Collaborative Platform for Establishing Truku Language Corpus in Taiwan

*Yihao Hsiao, Liangyu Chen, Chenyu Chiang and Mengchi Huang*

Research on Feature Selection Techniques for Support Vector Regression-based State of Health Estimation of Lithium-Ion Batteries

*Jia-Hong Fang, Yu-Shan Cheng, Yi-Hua Liu and Bo-Jhih Chen*

Automated School Lunch Menu Planning with Machine Learning Algorithms

*Hao-Yu Lin, Jeen-Shing Wang and Ya-Ting C. Yang*

A Space-Saving Algorithm for Enumerating Minimal Generators in Negative Rule Mining

*Shogo Mochizuki and Koji Iwanuma*

Predicting Length of Hospital Stay using Machine Learning

*Mari Ito, Kanade Takeuchi, Masaaki Suzuki, Aaron Aurelius, Masaki Koizumi, Akemi Yano and Sadaki Inokuchi*

Toward Parallel Task Allocation in Multi-robot Environment based on Auction Mechanism with Deadlock Constraints

*Md Sabbir Hossain and Naoki Fukuta*

Research on Pain Detection Using OpenFace

*Shota Ando, Nobuyuki Somekawa, Yoko Tsukamoto, Haruki Ueno and Hiroshi Komatsugawa*

Construction and Examination of an Emotional Speech Synthesis System Using a CNN Image Classification Model

*Sanggyu Shin*

Inverse Reinforcement Learning via Variational Attention Bottleneck

*Kao-Shing Hwang, Jin-Ling Lin and Ting-Yin Chen*

Parameter identification of the parameters of lithium-ion battery model based on metaheuristic algorithms

*Bo-Jhih Chen, Yi-Hua Liu, Yu-Shan Cheng and Jia-Hong Fang*

The Trajectory Tracking of the Quadrotor based on Backstepping Sliding Mode Control

*Shun-Hung Tsai, Pin-Yi Song, Hsuan-An Lin and Hung-Yi Lin*

### **BMOT Poster**

Digital Business Model Analysis Using Natural Language Processing

*Masahiro Watanabe and Naoshi Uchihira*

### **SBIT Posters**

Study of Modified DANP Model and System Simulation Method in E-commerce

Logistics: Taking AMR Autonomous Mobile Robot Pickup Solution Selection as an Example

*Teng-Sheng Su, Shan-Ru Hu, Hui-Ting Liang, Qi-Chang Zhuang, Yi-Qing Xu, Xuan-Wei Hong and Shan-Ting Zhang*

Influence sources of Wearable Healthcare Devices Adoption and Diffusion

*Ying-Hsuan Chao and Hersen Doong*

Utilizing Social Trust Mechanisms to Minimize the Influence of False Ratings on Recommendation Systems

*Sin-Hua Wu and Lien-Fa Lin*

### **IDDC Poster**

A Preliminary Implementation of an Explanation Mechanism for One's Own Curiosity by using Ontology and Knowledge Graph

*Tomoaki Ishiguro and Naoki Fukuta*

### **DSTM Posters**

The Effect of Digital Workflows on Revenue Collection: The Case of Hotel Tax in Thailand

*Grichawat Lowatcharin, Prasongchai Setthasuravich, Pakpoom Phonsungnoen, Kasipat Thonmanee, Pathompohn Mangma, Krisada Prachumrasee and Panpun Ronghanam*

A Study on Classification of Word-of-Mouth Information Using BERT



*Takaaki Hosoda, Yuya Yokoyama and Tokuro Matsuo*

DH Dilemma: Analyzing Moral Hazard in MLB Pitching Decisions

*Wen-Jhan Jane*

Proposal of a Dual System Model for the Consensus Building Process in the Problem Formulation Process in Groups

*Hiroyuki Furuya, Takaaki Hosoda and Tokuro Matsuo*

## **July 9 (Tue) 9:45AM-11:50AM**

### **Room International Conference Center SCAI 5**

Session Chair: Takafumi Nakanishi (Musashino University)

Noh's choreography systematization and diversity strategy for Service Robots

*Masahiko Narita*

Reducing Redundant Computation in Multi-Agent Coordination through Locally Centralized Execution

*Yidong Bai and Toshiharu Sugawara*

Cascading Taxonomic Attention Networks for Hierarchical Text Classification

*Koichi Tanigaki, Koji Cho and Shuichi Tokumoto*

Consumer Price Index Dynamics Unveiled: Approximate Inverse Model Explanations (AIME) of News Text Data and Consumer Price Index data

*Kunihiko Hayashi and Takafumi Nakanishi*

### **Room 62 SBIT 1**

Session Chair: Yukihiro Shintani (Chiba Institute of Technology)

Jumpstarting and Evolving a Software Quality Management Initiative: From Pre-Web to DevOps

*James Cusick*

Development of Teaching Methods in Basic Nursing Education Using Process Flow Diagram

*Hanae Okamoto, Kiyoko Tokunaga, Katsuaki Suzuki and Hideto Ogasawara*

A case study on the internal process re-engineering of traditional industry from a resource-based perspective

*Che-Yu Hung, Sheng-Pin Wu, Chien-Chih Wang and Tai-Yu Lin*

### **Room 63 ESKM-SS3-1**

Session Chair: Kouichi Hirata (Kyushu Institute of Technology)

Improving Interpretability in Document-Level Polarity Classification by Applying Attention

*Shingo Kato and Daisuke Ikeda*

Extracting Long COVID Knowledge from LitCovid: A Glossary-Based Approach

*Atsuko Yamaguchi, Reo Takeda and Yuka Tateisi*

Comparison with Detection of Bacteria from Gram Stained Smears Images by Various Object Detectors

*Tsubasa Tanaka and Kouichi Hirata*

### **Room 64 LTLE 2**

Session Chair: Khan M.Fahim Ferdous (Toyo University)

A Study on Analysis of Learning Process in Programming Learning Support System by Card Operation

*Natsumi Tanabe and Shimpei Matsumoto*

A Study on Quantitative Quality Evaluation of the Impact of Indentation in Source Code Using Eye-Tracking

*Kou Yorimoto and Shimpei Matsumoto*

Cultivating Effective Classroom Management: The Implementation of an Adaptive Gamification Platform

*Chi-Fang Chang, Tsung-Yen Chuang, Wei-Fan Chen and Yen-Ning Su*

## **July 9 (Tue) 1:00PM-2:15PM**

### **Room International Conference Center SCAI 6**

Session Chair: Katsuhide Fujita (Tokyo University of Agriculture and Technology)

Almost Order Preserving Matching

*Wen-Wen Liao and Chang-Biau Yang*

A Method for Determining Utterance-Response Relationships between Japanese Novel Lines for Constructing a Daily Dialogue Corpus

*Kazuma Iwamoto and Kazuaki Ando*

Time Scale Analysis of Long Sequential Robot Behavior Generated by gMLP

*Koki Sato, Ryo Kobayashi, Sho Yamauchi and Keiji Suzuki*

### **Room 61 LTLE 3**

Session Chair: Chengjiu Yin (Kobe University)

Subject Relevance Visualization using Word2Box

*Youji Ochi and Nanako Hashimoto*

Towards Human-Level Evaluation: Assessing the Potential of GPT-4 in Automated Evaluation and Feedback Generation on Japanese Essays

*Sayaka Nakamoto, Yoshiaki Okamoto, Takashi Nakakouchi and Kazutaka Shimada*

AIME Image Insights: Transforming Image Recognition with Approximate Inverse Model Explanations

*Takafumi Nakanishi*

### **Room 62 BMOT 5**

Session Chair: Hidefumi Kawakatsu (Onomichi City University)

Dynamic subscription pricing for digital service platform

*Cheng-Han Wu and Ling-Ya Huang*

Application of Analytic Hierarchy Process for Order Assignment to Affiliated Stores

*Takaki Kawamoto and Takashi Hasuike*

### **Room 63 LTLE 4**

Session Chair: Chih-Ming Chen (National Chengchi University)

The Impact of Collaborative Digital Reading Annotation System on Learning Performance and Motivation in Solving Mathematical Application Problems

*Shu-Hsuan Chiu, Ming-Chaun Li, Chih-Ming Chen and Fu-Hsiu Kuo*

Developing a Meso-Viewpoint Discussion System to Promote Online Learning Performance

*Ling-En Chien, Ming-Chaun Li, Chih-Ming Chen and Huei-Chun Huang*

Empowering Elementary Students' Scratch Programming Skills through a Jigsaw Collaborative Learning Method in a Metaverse Virtual Space

*Wan-Juan Dai, Ming-Chaun Li, Chih-Ming Chen and Ming-Yan Huang*

## **July 9 (Tue) 2:45PM-4:50PM**

### **Room International Conference Center SCAI 7**

Session Chair: Naoki Fukuta (Shizuoka University)

Orthogonal vector projection method for medical diagnosis

*Irosh Fernando*

Estimating the Impact of Classroom Speech Using a Large Language Model

*Sakuei Onishi, Syosei Kojima, Hiromitsu Shiina and Tomohiko Yasumori*

Simulation of Classroom Speech by Elementary School Teachers Using a Large Language Model with LoRA Hyperparameter

*Syosei Kojima, Sakuei Onishi, Hiromitsu Shiina and Tomohiko Yasumori*

### **Room 61 LTLE 5**

Session Chair: Yuichi Ono (University of Tsukuba)

Development and implementation results of a DX literacy standard skills survey using generative AI

*Masahiro Sakamoto, Yukihiro Matsubara and Kousuke Mouri*

Parent-Child Interaction in Game-Based Learning

*Ming-Chaun Li, Chin-Chung Tsai and Huei Tse Hou*

Humor, mankind's greatest blessing: Exploring the relationship between sense of humor and psychological well-being among high school students in Taiwan

*Chih-An Lin*

Improvement of Argumentation Structure Visualization for Feedback on Students' Reports

*Sora Toyama, Satoru Kogure, Yasuhiro Noguchi, Koichi Yamashita and Tatsuhiro Konishi*

### **Room 62 DSIR 3 + DSIR-SS3**

Session Co-Chairs: Kenjiro Sakaki (Tenshi college), Kunihiko Takamatsu (Tokyo Institute of Technology) and Naruhiko Shiratori (Tokyo City University)

Beyond Silos: Eduinformatics as a Catalyst for Dissolving Faculty and Staff Boundaries in Higher Education

*Kunihiko Takamatsu, Sayaka Matsumoto, Naruhiko Shiratori, Ikuhiro Noda, Shintaro Tajiri, Kenya Bannaka, Yasuhiro Kozaki, Hibiki Ito, Shotaro Imai, Yasuo Nakata and Masao Mori*

Effects and Limitations of University Information Disclosure: A Study on the Impact on University Choice

*Nozomi Yoshida and Rie Mori*

A Study on the Influence of Community-Based Education on Post-University Workers and Its Time Dependence

*Tatsuya Tsumagari, Yoko Nakazato and Takashi Tsumagari*

### **Room 63 ESKM-SS3-2**

Session Chair: Kouichi Hirata (Kyushu Institute of Technology)

Activation Functions for Detection of Bacteria from Gram Stained Smears Images by YOLOv8

*Kouya Kagemoto and Kouichi Hirata*

Annotation along Arranged Bacteria to Detect Gram Positive Cocci from Gram Stained Smears Images

*Ukyo Kashino, Mayu Yoshida and Kouichi Hirata*

Data Augmentation for Detection of Bacteria from Gram Stained Smears Images by YOLOv8

*Ryunosuke Nakajo, Minori Tsutsui and Kouichi Hirata*

**5:30PM-6:15PM      Bus Departure**

**6:30PM-8:00PM      Conference Banquet**

**July 10 (Wed) 9:45AM-11:50AM**

**Room International Conference Center SCAI 8**

Session Chair: Hisashi Hayashi (Advanced Institute of Industrial Technology)

Adding Gaussian Noise to Sparse Frames from a mmWave Radar for Improving HAR

*Taku Watanabe and Runhe Huang*

Investigating Nonparametric Testing in Event Detection for Non-intrusive Load Monitoring

*Men Shen Tsai and Yen-Kuang Lin*

Detection of pre shoplifting suspicious behavior using deep learning

*Sujan Shrestha, Yoji Taniguchi and Tetsuo Tanaka*

### **Room 61 LTLE 6**

Session Chair: Session Chair: Khan M.Fahim Ferdous (Toyo University)

Programming Education Methods for Elementary School Students and Their Relation with Personal Preferences

*Emi Ichimura and Tomonari Kamba*

Development of a Learning Support System for Improving Metacognition in Programming Exercises

*Tepei Oyama and Koji Kagawa*

A Cooperative Card Game for Learning Social Media Etiquette

*Toshiki Katanosaka, Fahim Khan and Ken Sakamura*

Preliminary Study of Teachers' Opinions on the Effective Use of Digital Textbooks

*Fumiko Yagisawa, Motoko Asato and Tatsuya Horita*

Visualization for easier recognition of low-risk and successful passes in a Basketball match

*Taketo Shibasaki, Kenji Matsuura, Hironori Takeuchi and Tetsushi Ueta*

### **Room 62 IDDC 2 + IDDC-SS1**

Session Chair: Min Song (Yonsei University) and Taishi Nemoto (University of Kochi)

Development and Proposal of an Interactive Educational Platform Based on the Concept of Augmented Intelligence

*Kazuya Murata and Taishi Nemoto*

P Analyzing User Behavior in Scenario-based Virtual Reality Environments using Knowledge Graphs

*Kensuke Taninaka, Yoshiki Furuya, Keigo Sakamoto, Tsunenori Mine and Shogo Fukushima*

Improving Text Generation on Images with Synthetic Captions

*Junyoung Koh, Sanghyun Park and Joy Song*

Exploring the Potential of Novel Image-to-Text Generators as Prompt Engineers for CivitAI Models

*Sophia Song, Joy Song, Junha Lee, Younah Kang and Hoyeon Moon*

### **Room 63 ESKM 2**

Session Chair: Kosuke Kaneko (Kyushu University)

Defect Detection and Visualization of Understanding Using Fully Convolutional Data Description Models

*Fusaomi Nagata, Shingo Sakata, Hirohisa Kato, Keigo Watanabe and Maki K. Habib*

A time-dependent Markov GWR model of the flow of people in Kyoto City

*Hiroshi Tsuda and Yu Ichifuji*

Table-To-Text Using Pretrained Large Language Model and LoR

*Hidekazu Yanagimoto, Iroha Kisaku and Kiyota Hashimoto*

Uncovering the Critical Traits of Sustainable Brand Success in the Attention Economy from Social Media

*Shih-Ya Liao and Yung-Ming Li*

### **July 10 (Wed) 1:00PM-2:15PM**

#### **Room International Conference Center SCAI 9**

Session Chair: Tenda Okimoto (Kobe University)

Enhancing Book Discovery: A Personalized Recommender System Powered by Large Language Models

*Te-Chuan Lin and Yung-Ming Li*

A Fast Season Length Estimation using Sliding Discrete Fourier Transform for Time Series Streaming Data

*Thanapol Phungtua-Eng and Yoshitaka Yamamoto*

#### **Room 61 LTLE 7**

Session Chair: Kousuke Mouri (Hiroshima City University)

Book Title Recognition on 360VR Images for VR Tour of Library Building

*Yoshihiro Okada, Wei Shi and Kosuke Kaneko*

Construction of Comprehensive Student Support Using Metaverse Platforms in a Distance Learning University

*Keisuke Misono and Kazuya Murata*

### **Room 62 SBIT 2**

Session Chair: Yukihiko Shintani (Chiba Institute of Technology)

Distributed hierarchical AI architecture for meta-described local dynamic maps in autonomous driving

*Hiroshi Miyata, Masatoshi Saitoh, Kazutami Arimoto, Atsushi Hayami, Hisayoshi Mizuno, Yukihiko Shimazu and Tomoyuki Yokogawa*

Analysis of Consumers' Willingness to Pay for Eco-Friendly Insulation Tape and Its Influencing Factors

*Chien-Chih Wang, Bo-Yi He and Che-Yu Hung*

### **Room 63 ESKM-SS1 + ESKM-SS2**

Session Co-Chairs: Yao Hu (Keio University) and Daisuke Ikeda (Kyushu University)

Global-Local Consistency for Cost-Effective Anomaly Localization with Point Annotations

*Keiichi Nakanishi, Ryoya Katafuchi and Terumasa Tokunaga*

Ancestral-Path Descendant-Labels Histogram Distance for Rooted Labeled Trees

*Daisuke Abe and Kouichi Hirata*

## **July 10 (Wed) 2:45PM-4:50PM**

### **Room International Conference Center SCAI 10**

Session Chair: Katsuhide Fujita (Tokyo University of Agriculture and Technology)

An Active Listening Dialogue Model Focused on “Open Questions” using Reinforcement Learning

*Nana Matsumoto and Kazuaki Ando*

Surface Defect Detection in Industrial Parts Using the YOLO-based Method with Enhanced Spatial Features and Attention Mechanism

*Zhi-Juan Jian and Ming-Hsiang Su*



No-code/low-code ophthalmic lens design using a genetic algorithm that simplifies optical design simulation

*Shin Kubota, Kenichi Tabei, Kazuhiko Oonuma and Hisashi Hayashi*

Greenwashing Detection Mechanism based on Multimodal Analysis and Social Intelligence

*Shih-Yuan Huang and Yung-Ming Li*

### **Room 61 LTLE 8**

Session Chair: Chengjiu Yin (Kobe University)

Development of Score Measurement and Attack Functions in a Security Exercise System Enable Trial-and-Error

*Ichitoshi Takehara, Yuki Kami, Hitoshi Kamei, Koji Kida and Keizo Saisho*

A teaching materials recommendation system considering individual characteristics

*Chengjiu Yin, Ryoya Shiroki, Huiyong Li and Lin Lin*

The Development of Robot-embedded Cyber-Physical Learning Environment for Enhancing Learners' STEM Competencies

*Chih-Chien Hu, Imam Yuadi, Ming-Hsien Chen and Hsieh-Chang Huang*

### **Room 62 SBIT 3**

Session Chair: Yukihiko Shintani (Chiba Institute of Technology)

Development of a Communication Analysis System for Detecting Isolated Users in Slack

*Ryosuke Takizawa, Isshin Nakao, Kensuke Taninaka, Akihisa Takiguchi, Toshiki Hayashida, Hiromu Motomatsu and Yutaka Arakawa*

Personalized E-shopping Recommendations for Sustainable Consumption

*Chin-Hsuan Lo and Lien-Fa Lin*

### **Room 63 ESKM 3**

Session Chair: Daisuke Ikeda (Kyushu University)

Generating High-Quality Distributed Representations of Words Using Wiktionary and Sentence-BERT

*Ryota Nishiura, Seiji Tsuchiya and Hirokazu Watabe*

NLPDedup: Using Natural Language Processing for Data Deduplication

*Hinata Yokoyama, Kazuma Iwamoto, Ichitoshi Takehara, Kazuaki Ando and Hitoshi Kamei*

Metaphor detection with additional auxiliary context

*Takuya Hayashi and Minoru Sasaki*

A Drug Abuse Detection Based on User Behavior and Linguistic Style

*Tian-Jyun Tseng and Yung-Ming Li*

Sense Tagged Example Generation Using BERTScore

*Hyuga Nagatomo and Minoru Sasaki*

**5:00PM-6:30PM      Farewell Reception & Wine, Beer, and Beverages  
at Foyer**

**July 11 (Thu) 9:45AM-11:50AM**

**Room International Conference Center SCAI 11**

Session Chair: Takafumi Nakanishi (Musashino University)

Multimodal Adaptive Structural Deep Belief Network for Emotion Recognition on RAVDESS Dataset

*Shin Kamada and Takumi Ichimura*

Implementation Method of an Autonomous Art Exhibition System with Open-Source Hardware

*Yosuke Tsuchiya and Naoki Ishibashi*

**Room 61 LTLE 9**

Session Chair: Kosuke Kaneko (Kyushu University)

Examining Critical Thinking Skills in Game-Based Learning: A Behavioral Analysis Approach

*Tsung-Yen Chuang, Yu-Hsuan Lu, Szu-Kai Tsai and Wei-Fan Chen*

Optimizing an Automatic Text Analysis Model with Generative Artificial Intelligence System for Gaming Strategic Behaviors

*Geng-De Hong, Ju-Ling Shih, George Ghinea, Yu-Hao Lu and Hsuan-Wen Chen*

The Learning Effectiveness of IoT-enhanced Historical Role-Play Educational Game <  
Unveil Dutch Times >

*Hsuan-Wen Chen, Ju-Ling Shih, Yueh-Chi Wang, Geng-De Hong and Yu-Hao Lu*

Exploring Relationships Between People and Organizations: A Digital Humanities  
Research Tool Based on AI Technology for Knowledge Graph Analysis

*Chien-Yun Liang, Ming-Chaun Li, Chih-Ming Chen and Chun-Yu Lin*

#### **Room 62 ESKM 4**

Session Chair: Noriko Sugimoto (Sojo University)

Virtual Drum System Development using Motion Detection

*Soonmin Hong, Stephen Karungaru and Kenji Terada*

Automatic Few-shot Selection on In-Context Learning for Aspect Term Extraction

*Koki Imazato and Kazutaka Shimada*

A tool for associative text analysis to enhance efficiency in exploring historical texts

*Tien-Fu Chang, Ming-Chaun Li, Chih-Ming Chen and Xian-Xu Chen*

#### **Room 63 SCAI 12 + SCAI-SS2 (Onsite + Online)**

Session Chair: Jaouhar Fattahi (Associate professor at Laval University)

Minimizing Model Misclassification using Regularized Loss Interpretability

*Elyes Manai, Mohamed Mejri and Jaouhar Fattahi*

Relationship between qualitative expressions in MD&A and managements' forecast  
accuracy

*Yutaka Kuroki, Kei Nakagawa and Kiyoshi Yakabi*

Classification of Capacitor Bank Switching using Fuzzy Interference Systems in 230  
kV Substation

*Theerasak Patcharoen, Chaichan Pothisarn, Atthapol Ngaopitakkul, Santipont*

*Ananwattanaporn, Praikanok Lertwanitrot and Suntiti Yoomak*

Comparative Study for Discrete Wavelet Transform between Single and Double  
Detection Approach to Fault Classification on Transmission Line

*Praikanok Lertwanitrot, Atthapol Ngaopitakkul and Santipont Ananwattanaporn*

**July 11 (Thu) 1:00PM-2:15PM**

### **Room International Conference Center SCAI 13**

Session Chair: Hisashi Hayashi (Advanced Institute of Industrial Technology)  
Congestion Alleviation and Efficiency Improvement in Large-Scale Pedestrian  
Facilities through Optimization of Pre-Evacuation Times

*Junyu Li, Go Inoue, Rie Sato, Atsushi Shibata, Jun Ito and Hisashi Hayashi*

Wavelet coherence of COVID-19 pandemic variables in Japan

*Goizalde Badiola and Manuel Graña*

### **Room 61 BMOT 6**

Session Chair: Antonio Oliveira Nzinga Rene (Toyama Prefectural University)

What Triggers Migrant Entrepreneurs to Move to Depopulated Areas?

*Osamu Nakajima and Hidekazu Iwamoto*

Improvement of Examining method with Construal Level Theory Perspective for  
Reward-Based Crowdfunding Performance

*Lei Zhou, Fuminori Kimura and Hersen Doong*

### **Room 62 ESKM 5**

Session Chair: Tsunenori Mine (Kyushu University)

YODA: Middleware of Static Analysis Tools for IoT Firmware - Proposal and  
Evaluation of Time Reducing Mechanisms for Setup, Preprocessing, and Analysis

*Minami Yoda, Shigeo Nakamura, Yuichi Sei, Yutaka Matsuno, Yasuyuki Tahara and  
Akihiko Ohsuga*

4-gram Applied to English Q&A Statements to Obtain Factor Scores

*Yuya Yokoyama*

### **Room 63 LTLE 10 and IDDC (Onsite + Online)**

Session Chair: Yuichi Ono (University of Tsukuba)

Effectiveness of Pitch Discrimination Practice Using a Method of Listening for Pitch in  
a Learner's Own Voice Quality

*Kazuki Sato, Katsumi Sato, Yoko Usui, Yoshikazu Watarai and Junya Oikawa*

Building Cloud Base Cyber Range by Designing an Efficient Container Distribution  
API Using Docker

*Sanggyu Shin*

Exploring Perceptions & Reactions to Digital Humans

*Edward Abel and Anne Dorthé Larsen*

## **July 11 (Thu) 2:45PM-4:00PM**

### **Room International Conference Center SCAI 14**

Session Chair: Tenda Okimoto (Kobe University)

Skeleton Detection Using Dual Radars with Integration of Dual-View CNN Models and mmPose

*Masaharu Kodama and Runhe Huang*

Application of Yolov5-based Image Recognition Model in Product Categorization

*Chun-Yu Lin and Ming-Hsiang Su*

### **Room 61 LTLE 11 + LTLE-SS1**

Session Co-Chairs: Michiyo Oda (Reitaku University) and Yuichi Ono (University of Tsukuba)

Confidence effects in an EMI classroom about using transcription tools for Chinese-speaking students

*Wen-Chun Lin, Yan-Yi Chen, Yu-Chi Yeh and Chih-Kai Chang*

Exploring Elementary School Students' Perceptions Towards Socioscientific Issues Through the Role-Playing Game Perceptions

*Yu-Hao Lu, Ju-Ling Shih, Pin-Chen Chen, Geng-De Hong and Hsuan-Wen Chen*

Experiments of Automatic Scoring Using Generative AI in a Summary Essay Learning System

*Takahiro Yamasaki and Ayako Hiramatsu*

### **Room 62 BMOT 7 + BMOT-SS1**

Session Chair: Hidekazu Iwamoto (Josai International University)

Influences of Prolonged Internships on University Students' Attitudinal Shifts within the Hospitality and Tourism Sectors - Insights and Implications from Survey Data –

*Masashi Ishitani*

ABM Demonstrates New Successful Diversity Approach for Team Building and Outcomes

*Junji Ochi, Jun-Ichi Asaka, Kenta Abe, Kentaro Iwata and Hisashi Hayashi*

Proposed Analytical Process for More Convenient Utilization of Open Data - Verification Using Tourist Number Data –

*Soh Sakurai, Noriko Shibata and Akira Nagamatsu*

**Room 63 SCAI 15 (Onsite + Online)**

Session Chair: Takafumi Nakanishi (Musashino University)

Forced and Natural Creative-Prototype Learning for Interpreting Multi-Layered Neural Networks

*Ryotaro Kamimura*

Association Rule Breaking Based Diversity for Recommender Systems

*Edward Abel and Andrew Goddard*

Construction and Examination of an Emotional Speech Synthesis System Using a CNN Image Classification Model

*Sanggyu Shin*

**5:00PM-6:30PM Ice-cold beer Networking Reception & Conference Adjournment at Foyer**