

Conference Program

14th IIAI International Congress on Advanced Applied Informatics

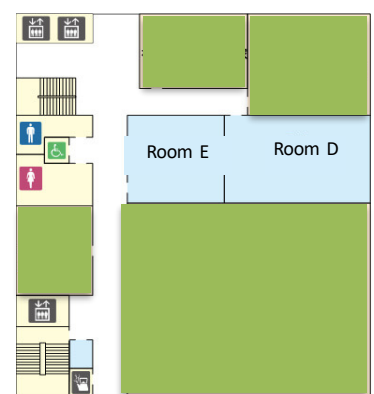
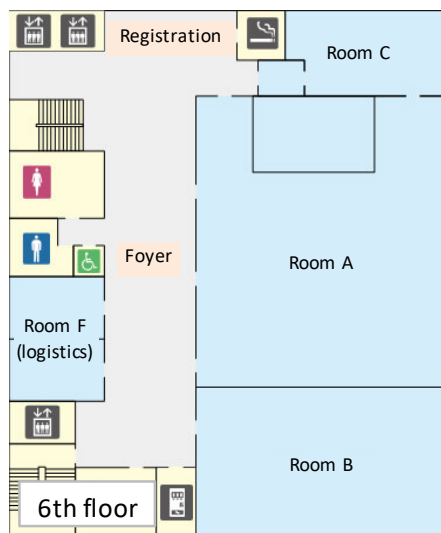
July 8-13, 2023, Koriyama Japan

Venue: The Koriyama Chamber of Commerce and Industry, Koriyama City, Japan

July 8 (Sat)					
	Room A	Room B	Room C	Room D	Room E
1:00PM-5:00PM	Registration & Welcome Beverage @ Foyer				
1:30PM-2:45PM	SCAL-SS2-1	ESKM 1			
2:45PM-3:00PM	Coffee Break at Foyer				
3:00PM-4:40PM	SCAL-SS2-2	ESKM 2			
4:00PM-5:00PM	Ice-cold Beer and Beverage Greeting @ Foyer				
July 9 (Sun)					
	Room A	Room B	Room C	Room D	Room E
9:00AM-5:00PM	Registration & Morning Coffee @ Foyer				
9:30AM-12:00PM	DSIR 1 + DSIR-SS3	SCAL-SS1 1	LTLE-SS1 1	BMOT-SS1	
12:00PM-1:15PM	Lunch on your own & Coffee				
1:15PM-2:30PM	DSIR SS2	SCAL-SS1 2	SBIT 1	DSTM-SS2	
2:30PM-2:45PM	Coffee Break at Foyer				
2:45PM-4:50PM	DSIR-SS1	SCAL-SS1 3 + SCAL 2	ESKM-SS2	LTLE 1	
5:00PM-6:00PM	Welcome Beverage & Cocktail at Foyer				
July 10 (Mon)					
	Room A	Room B	Room C	Room D	Room E
9:00AM-5:00PM	Registration & Morning Coffee @ Foyer				
9:30AM-12:00PM	SCAL 3	LTLE2	LTLE-SS1 2	SCAL-SS3 1	
12:00PM-1:15PM	Lunch on your own & Coffee				
1:15PM-1:40PM	IIAI AAI 2023 Opening Ceremony at Room A + B				
1:40PM-2:40PM	Keynote 1 at Room A + B				
2:40PM-3:00PM	Coffee Break at Foyer				
3:00PM-4:40PM			BMOT-SS2 & SBIT-SS1	SCAL-SS3 2	
4:00PM-5:00PM	Poster Setting Up at Room A + B				
5:30PM-8:00PM	Welcome Reception and Poster Session at Room A + B				
July 11 (Tue)					
	* Registration desk is closed all day.				
8:45AM	Meeting Point: Conference Venue				
9:00AM-12:00PM	Bus Departure to Technical/Factorial Tour				
12:00PM-2:30PM	Luncheon Keynotes 2 & 3 at Ryokusuien				
2:30PM-4:10PM	Technical/Factorial Tour until 4:10PM				
6:30PM-8:30PM	Banquet & Award Presentation at 4th Floor of Koriyama View Hotel Annex				
July 12 (Wed)					
	Room A	Room B	Room C	Room D	Room E
8:00AM-5:00PM	Registration & Morning Coffee @ Foyer				
8:45AM-10:25AM	SCAL 4	LTLE 3	ESKM 3	IDDC 1	Technical Session
10:25AM-10:40AM	Coffee Break at Foyer				
10:40AM-11:55AM	SCAL 5	LTLE 4	ESKM 4	BMOT 1	Technical Session
11:55AM-1:15PM	Lunch on your own				
1:15PM-2:30PM	SCAL 6	LTLE 5	ESKM 5	BMOT 2	-
2:30PM-2:45PM	Coffee Break at Foyer				
2:45PM-4:50PM	SCAL 7	LTLE 6	ESKM 6	BMOT 3	SBIT-SS2
5:00PM-6:30PM	Farewell Reception at Foyer				
July 13 (Thu)					
	Room A	Room B	Room C	Room D	Room E
8:30AM-11:00AM	Registration & Morning Coffee @ Foyer				
8:45AM-11:40AM	SCAL 8	BMOT 4	DSTM 1 & DSTM-SS1		
11:40AM-1:00PM	Conference Adjournment & Ice-cold beer Networking				
1:00PM-5:00PM		Board Meeting			
5:30PM-8:00PM	VIP Dinner				



Congress Venue



July 8 (Sat) 1:00PM-5:00PM

Foyer Registration & Welcome Beverage @ Foyer

July 8 (Sat) 1:30PM-2:45PM

Room A SCAI-SS2 1

Session Co-Chairs: Yukari Shirota (Gakushuin University), Basabi Chakraborty (Madanapalle Institute of Technology and Science), Junichi Tomita (Toyo University)

The Network Structure of Open Innovation and the Creativity in Semiconductor Manufacturing Equipment Industry

Junichi Tomita, Yukari Shirota, Eishi Fukushima and Masahide Terahata

Impact Analysis of Supply Chain Competence on Market Capital Growth in Automobile Manufacturers

Yukari Shirota and Basabi Chakraborty

Relationship Analysis Between Stock Prices and Financial Statements in the Automobile Industry

Kenji Yamaguchi

Room B ESKM 1

Session Chair: Daisuke Ikeda (Kyushu University)

The Impact of Language Properties in Multilingual Datasets on Sarcasm Detection

Linshuo Yang and Daisuke Ikeda

A Recommendation Mechanism Combined with Bayesian Networks and Incentive Theory - A Recommend System Design

Chin-Yu Hsieh and Jyh-Hwa Liou

Fabric Defect Detection System using YOLO

Masashi Kawaguchi, Yuta Morimitsu, Ryusei Watanabe, Chihiro Ikuta, Naohiro Ishii and Masayoshi Umeno

July 8 (Sat) 3:00PM-4:40PM

Room A SCAI-SS2 2

Session Chair: Yukari Shirota (Gakushuin University), Basabi Chakraborty (Madanapalle Institute of Technology and Science), Junichi Tomita (Toyo University)

Analyzing Relationship between Company's SDGs Activities and Financial Information using SHAP

Kouta Ohi, Takako Hashimoto, Yukari Shirota, Kaya Akagi, Takao Terano and Ryohei Egusa

Gender Equality Level Analysis in Indonesia by Shapley Values

Takako Hashimoto, Yukari Shirota, and Riri Fitri Sari

Room B ESKM 2

Session Chair: Yuya Yokoyama (Advanced Institute of Industrial Technology)

The Effect of Salesperson Visual and Audio Cue Combinations Online on Customer Motivation to Process

Kayoko Yashiro, Seiko Shirasaka, Kohei Tanaka and Koki Kusano

NFT Collection Recommendation Mechanism Combining Social Capital, Trend Prediction and Wash Trading Filtering

Sheng-Ching Wang and Yung-Ming Li

An Analysis of Shifts in Public Interests and Sentiments in Japan Using News Tweet Data during the COVID-19 Pandemic

Satoshi Fukuda, Hidetsugu Nanba and Hiroko Shoji

Handling Data Scarcity in Code-Mixing Using Learning-Based Approaches

Niraj Pahari and Kazutaka Shimada

July 8 (Sat) 4:00PM-5:30PM

Foyer Ice-cold Beer and Beverage Greeting

July 9 (Sun) 9:00AM-5:00PM

Foyer Registration & Morning Coffee @ Foyer

July 9 (Sun) 9:30AM-12:00PM

Room A DSIR 1 + DSIR-SS3

Session Co-Chairs: Kenjiro Sakaki (Tenshi College), Kunihiko Takamatsu (Tokyo Institute of Technology)

Recurrent education in higher education institutions for clinical laboratory scientists who are responsible for ultrasonography examination

Aoi Kishida, Syuji Tamura, Kunihiko Takamatsu and Yasuo Nakata

A Two-Step Approach for Syllabus Development and Evaluation using Machine Learning such as doc2Vec based on Eduinformatics:

Advancements and Challenges in Adopting Rubrics for Grading Criteria in Japanese Higher Education

Akira Ito, Hibiki Ito, Sayaka Matsumoto, Ikuhiro Noda, Kenya Bannaka, Keita Nishiyama, Takafumi Kirimura, Taion Kunisaki, Kenichiro Mitsunari, Katsuhiko Murakami, Rryosuke Kozaki, Aoi Kishida, Mizuki Kondo, Shotaro Imai, Yasuo Nakata, Masao Mori, Masato Omori and Kunihiko Takamatsu

Using Azure Machine Learning to Detection of At-Risk Students

Dun-Cheng Chang and Shinyi Lin

A Theoretical Framework for Disruptive Changes Based on Information Dissemination

Daisuke Ikeda, Kun Qian and Kengo Nawata

Analysis of College Students' Career Awareness after Taking First-Year Career Courses Using the Structural Topic Model

Tatsuya Tsumagari, Yoko Nakazato and Takashi Tsumagari

Typology of students graduating from college using dropout probabilities

Naruhiko Shiratori

Room B SCAI-SS1 1

Session Co-Chairs: Masanori Hirano (The University of Tokyo), Kei Nakagawa (Nomura Asset Management Co, ltd), Yoshiyuki Suimon (Nomura Securities Co., Ltd.); Hiroki Sakaji (The University of Tokyo)

Text Mining of Future Dividend Policy Sentences from Annual Securities Reports

Kaito Takano, Tomoki Okada, Yusuke Shimizu and Kei Nakagawa

Treasury yield spread prediction with sentiments of Beige Book and macroeconomic data

Masaki Fujiwara, Yoshiyuki Suimon and Kei Nakagawa

Policy Gradient Stock GAN for Realistic Discrete Order Data Generation in Financial Markets

Masanori Hirano, Hiroki Sakaji and Kiyoshi Izumi

Fact or Opinion? – Essential Value for Financial Results Briefing

Yutaka Kuroki, Tomonori Manabe and Kei Nakagawa

Multifactor Model with Deep Learning for Currency Investments

Shingo Sashida and Kei Nakagawa

Frequent Batch Auctions investigated by Agent-Based Model

Takanobu Mizuta and Kiyoshi Izumi

Room C LTLE-SS1 1

Session Chair: Kanitpong Piyanamvanit (Khon Kaen University)

Gender Differences in Programming Among Primary School Students

Michiyo Oda, Yoko Noborimoto, Minami Endo and Tatsuya Horita

The designing of Simulation Learning Environment to Enhance Scientific Explanation on the Topic of Gas for Grade 11 Students.

Kanitpong Piyanamvanit and Charuni Samat

A Cyber-Physical Mixed Reality System to Facilitate Chemical Laboratory Safety Education

Mei-Feng Lin, Ming-Chaun Li, Chih-Ming Chen and Chia-Cheng Tu

Using Constructivist integrated Gamification and AI As-sisted Learning Tool to Enhance Reading Comprehension for Forth Grade Students

Wipapan Sankumpa, Issara Kanjug and Samart Singma

Feature learning of Japanese pitch accents and applications to Japanese speech education

Ikuyo Masuda-Katsuse

Room D BMOT-SS1

Session Chair: Hidekazu Iwamoto (Josai International University)

Research on State and Challenges of Introduction of Medical Tourism in Japan by Text Mining

Yasushi Sugiyama, Hidekazu Iwamoto and Tokuro Matsuo

Unraveling Attendees' Needs: A Comparative Study of Online and On-site Participation in International Conferences in the post-Corona Era

Hidekazu Iwamoto and Tokuro Matsuo

A Study on the Usefulness of Internships – Viewed from the Needs of the Accommodation Industry and University Students –

Masashi Ishitani

An Analysis of the Bangladeshi Pharmaceutical Industry after LDC Graduation: Prospects and Challenges

Yaeko Mitsumori

Classifying Game Reviews by Using Natural Language Processing and Support Vector Machines with SMOTE-Tomek Algorithm

Yi-Yun Wang, Zi-Jie Luo, Mu-Chen Chen and Long-Sheng Chen

July 9 (Sun) 1:15PM-2:30PM

Room A DSIR-SS2

Session Chair: Yoshikazu Asada (Jichi Medical University)

The possibility of Moodle-based e-portfolio with database module for medical education – from the viewpoint of the usage for learning analytics and institutional research

Yoshikazu Asada

Research on the gap between the number matched and the number of first-year residents in Japanese training hospitals - Are full-matched hospitals really “good training hospitals”?

Koji Tsunekawa, Michiyo Nakashima and Toshiki Shioiri

Room B SCAI-SS1 2

Session Co-Chairs: Masanori Hirano (The University of Tokyo), Kei Nakagawa (Nomura Asset Management Co, ltd), Yoshiyuki Suimon (Nomura Securities Co., Ltd.); Hiroki Sakaji (The University of Tokyo)

Measuring Japanese Stock Correlation Networks and Application for Investment Strategy

Nozomu Kobayashi and Yoshiyuki Suimon

Export Nowcasting with AIS and Foot Traffic Data

Tsubasa Ueda, Takehide Hirose and Kiyoshi Izumi

Efficient Learning of Nested Deep Hedging using Multiple Options

Masanori Hirano, Kentaro Imajo, Kentaro Minami and Takuya Shimada

Room C SBIT 1

Session Chair: Motoi Iwashita (Chiba Institute of Technology)

Evaluation of Subjective Workload Using NASA-TLX and Heart Rate in Order-picking Operations

Kirika Matsuda, Yurika Ono and Aya Ishigaki

The Trust Mechanism Reconstruction of Energy Performance Contracting Leased Assets Securitization Based on BlockChain

Zonghan He, Wei Liu and Shuxia Wang

A new method for statistical arbitrage using eigendecomposition to generate stationarity

Daisuke Yoshikawa

Room D DSTM-SS2

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

A Study on Decision-Making with a Sense of Well-Being for the Elderly

Eriko Musashi, Takaaki Hosoda and Daisuke Ikeda

A Study of Problem Formulation in Groups

Hiroyuki Furuya, Takaaki Hosoda and Tokuro Matsuo

Classification of "Migrant Entrepreneurs" according to the relationship with the Local Community

Osamu Nakajima and Takaaki Hosoda

Developing Hypotheses and Theoretical Verification of Antecedents of Organization Engagement that Contribute to Clarification of Employee Engagement

Morihiko Ikemizu, Yuya Yokoyama, Takaaki Hosoda, Tokuro Matsuo and Teruhisa Hochin

Relationship between conflict resolution and sense of acceptability

Takaaki Hosoda and Kiyomi Miyoshi

July 9 (Sun) 2:45PM-4:50PM

Room A DSIR-SS1

Session Chair: Shotaro Imai (Tokyo Institute of Technology)

Establishment of an IR System for Institutional Decision-Making in Kyushu Institute of Technology

Tetsuya Oishi, Hirofumi Fukumaru, Akihiro Hayashi and Hiroshi Sakamoto

A Method of Digital Transformation Toward Effective Institutional Research

Shotaro Imai, Yoshihiko Togashi and Masao Mori

Academic IR on National University Corporation Hokkaido Higher Education and Research System

Takashi Nishide, Hisayoshi Toyokawa, Fumihiko Nakamura and Hiroshi Masui

Entity Linking among Categorized Knowledge Resources for Computer Science Curricula

Michiko Yasukawa and Koichi Yamazaki

Room B SCAI-SS1 3 + SCAI 2

Session Co-Chairs: Masanori Hirano (The University of Tokyo), Kei Nakagawa (Nomura Asset Management Co, ltd), Yoshiyuki Suimon (Nomura Securities Co., Ltd.); Hiroki Sakaji (The University of Tokyo)

Predicting Financial Asset Returns with Factor and Lead-Lag Relationships: Ridge Regression with Lagged Penalty

Tatsuki Masuda and Kei Nakagawa

Topic Classification of Key Audit Matters in Japanese Audit Reports by Zero-shot Text Classification

Nobushige Doi, Yusuke Nobuta and Takeshi Mizuno

Summarization of Investment Reports Using Pre-trained Model

Hiroki Sakaji, Ryotaro Kobayashi, Kiyoshi Izumi, Hiroyuki Mitsugi and Wataru Kuramoto

A Method of Evaluating User Preference Similarity for Destination Recommendations Based on Online Review Analysis

Yu-Hsiang Hsiao and Pei-Yi Hung

Room C ESKM-SS2

Session Chair: Evgeny Pyshkin (University of Aizu) and John Blake (University of Aizu)

Interactive Horror Gaming: Integrating Facial Expression Recognition to Enhance Player Engagement and Immersion

Yuan Tu and Maxim Mozgovoy

Pronunciation Scaffold 3.0: A User Experience and Usability Study

Nicholas Carr and John Blake

A Social Intelligence Mechanism for Information Security Alerts Recommendation

Peter Kuo and Yung-Ming Li

Precise Detection of Changes in Relatively Static Environments for Single-Board Computers

Yohei Nishidate, Yukihide Kohira, Shigeo Takahashi and Rentaro Yoshioka

Modeling Tsuruga-jo Castle Historical Landscape for Extending Sightseeing Experience

Keita Oakazaki and Evgeny Pyshkin

Room D **LTLE 1**

Session Chair: Kousuke Mouri (Hiroshima City University)

Development of a chatbot system based on learning and discussion status in pair work

Toshiki Nishio, Kousuke Mouri, Masaru Okamoto, Yukihiro Matsubara and Takafumi Tanaka

Designing Interactive Visualizations for Teaching Concurrent Programming

Marina Purgina and Maxim Mozgovoy

Proposal of a Learning Process Visualization Method for Learning Tasks with Toggles of Card Operation-Based Programming Learning Support System

Taiki Okuhira, Hiroshi Shigematsu and Shimpei Matsumoto

Artificial Intelligence & Art: A University Curriculum Course for Undergraduates

Gregory Garvey

Proposing Distance Learning with Constructivist Learning and Technology Facilitation for Learning Behavior

Pi-Jung Hsieh and Ing-Long Wu

July 9 (Sun) 5:00PM-6:00PM

Foyer **Welcome Beverage & Cocktail at Foyer**

July 9 (Sun) 7:30PM-9:00PM

HAI AAI 2023 Board Meeting & Congress Chairs Dinner

July 10 (Mon) 9:00AM-5:00PM

Foyer **Registration & Morning Coffee @ Foyer**

July 10 (Mon) 9:30AM-12:00PM

Room A **SCAI 3**

Session Chair: Naoki Fukuta (Shizuoka University)

Toward an Ontology-based Explainable Strategy Analysis on Multiplayer Multiteam Games

Tomoya Mizutani and Naoki Fukuta

Investigating the Performance Impact of Dimensionality Reduction on Word Vectors

Didier Gohourou and Kazuhiro Kuwabara

ARBITRARY-SCALE IMAGE SUPER RESOLUTION USING RESIDUAL IN RESIDUAL DENSE NETWORKS WITH NEW LOCAL IMPLICIT IMAGE FUNCTION

Yi-Yu Chen and Yi-Leh Wu

Exploring the Impact of Syntactic Structure Information on Unknown Entity Recognition in Transformer-based Natural Language Understanding

Rui Yang, Farnoosh Javar, Kei Wakabayashi and Johane Takeuchi

Rotational weight update in full-connection layers exceeds dropout in image recognition tasks

Tetsuya Hori and Yoichi Takenaka

Research on Atari Games using Evolutionary Computation with Successive Halving

Takuki Kurokawa and Hitoshi Iba

Room B **LTLE 2**

Session Chair: Yin Chengjiu (Kyushu University)

A study of learning support based on the frequency of occurrence of error messages in the C language

Kayu Morishige, Daichi Inoue and Shimpei Matsumoto

A Platform for Searching Texts for Desired Expressions in a User-Editable Pattern Matching Environment for Language Learning

Tatsuya Katsura and Koichi Takeuchi

Identifying and analyzing the repeated reading behavior using users' log data

Fuzheng Zhao, Chengjiu Yin and Etsuko Kumamoto

Enhancing Learning Performance with Interactive Test Dashboard and Diagnostic Feedback Mechanisms

Ting-Yu Liu, Ming-Chaun Li, Chih-Ming Chen and Wei-Tung Hsu

Proposal of driving operation support system using VR and eye tracking technology

Tetsuhiro Ito, Kousuke Mouri, Masaru Okamoto and Yukihiro Matsubara

Room C **LTLE-SS1 2**

Session Chair: Yuichi Ono (University of Tsukuba)

Developing a VR learning environment for an energy sustainability museum in Taiwan's elementary Science and Technology classes

Cheng-Huan Chen, Li-Hung Wang, Xuan-Ying Huang and Yong-Cih Yang

The Study of the Needs of Developing Design Thinking to Promote Learning Activities in Teaching Physical Education and Health Education for Pre-service Teachers

Nantapoom Gessala, Parama Kwangmuang and Lan Thi Nguyen

Unplugged Coding Learning Package and A.I. Assisted Learning Tool to Support Computational Thinking for Elementary School Students

Kanyarat Jaratsaeng, Issara Kanjug and Non Jarungsirwat

Evaluating User Experience and Effectiveness of an Immersive Virtual Learning Environment

Elke Brucker-Kley, Janick Michot, Thomas Keller, Martin Berger and Ilir Hundozi

Development Metaverse Learning Environment Base On Station Rotation Model To Promote Scientific Literacy And Self-Directed Learning On Topic Sequence Of Geological Event For 10th Grade Students

Ranad Sakong

Room D **SCAI-SS3 1**

Session Co-Chairs: Kazunori Iwata (Aichi University), Nobuhiro Ito (Aichi Institute of Technology), *Takeshi Uchitane* (Aichi Institute of Technology)

Spatio-temporal Network Analysis for Detecting Traffic Accident Clusters

Keisuke Ando, Yusuke Kuniyoshi, Kazuhiko Shimizu, Takeshi Uchitane, Naoto Mukai, Kazunori Iwata, Nobuhiro Ito and Yong Jiang

Development of Night-Time Weather Estimation Algorithm Using Image Processing with Low Cost Devices

Shota Kusabiraki, Shin Suzuki and Kazunori Iwata

Analysis of the Expected Possession Value in RoboCupSoccer Simulation 2D

Masaki Ban, Takumi Amano, Keisuke Ando, Takeshi Uchitane, Kazunori Iwata and Nobuhiro Ito

Traffic Information Interpolation System Based on Swarm Intelligence Applied for Real World Traffic Scenario

Satoshi Suga, Yuji Yamada, Ken Hayashi, Daiki Takamura, Fumito Ihara, Naoki Wakabayashi and Satoshi Kurihara

A Japanese Block-Structured Programming Language Environment for Beginner Programmers Using Drone

Yuta Shimmura and Kazunori Iwata

Effects of the Attunement of an Attack Target by Whispering in AIWolf

Tomohiro Murakami, Nozomi Nakao, Hikaru Miyake, Hayate Murata, Itsuki Amano, Taisei Kojima, Keisuke Ando and Nobuhiro Ito

July 10 (Mon) 1:15PM-1:40PM

Room A + B Opening Ceremony

Welcome Speech and Greetings

- Honorary Chair, Naohiro Ishii, International Institute of Applied Informatics, Japan
- Congress General Chair, Yuichi Ono, University of Tsukuba, Japan
- Congress Program Chair, Kunihiko Takamatsu, Tokyo Institute of Technology, Japan

Conference Chairs

- ESKM 2023: Daisuke Ikeda, Kyushu University, Japan
- LTLE 2023: Yuichi Ono, University of Tsukuba, Japan

- DSIR 2023: Yoshikazu Asada, Jichi Medical University, Japan
- SCAI 2023: Katsuhide Fujita, Tokyo University of Agriculture and Technology, Japan
- BMOT 2023: Hidekazu Hiwamoto, Josai International University, Japan & Shimpei Matsumoto, Hiroshima Institute of Technology, Japan
- SBIT 2023: Atsushi Shimoda, Chiba Institute of Technology, Japan
- IDDC 2023: Taishi Nemoto, Kagoshima Women's College, Japan
- DSTM 2023: Takaaki Hosoda, Advanced Institute of Industrial Technology, Japan

July 10 (Mon) 1:40PM-2:40PM

Room A + B Keynote 1

Session Chair: Yuichi Ono (University of Tsukuba)

Upsides and Downsides of Large Language Model

Prof. Hidekazu Yanagimoto, Dr. Eng., Osaka Metropolitan University

Abstract

In recent years, large language models have dramatically improved through pre-training with massive training data. Furthermore, by carefully generating texts provided to the large language models, it is possible to solve a wide range of natural language processing tasks. Considering that language models are originally designed to predict the next words based on preceding words, the results are truly remarkable. Research that extracts knowledge from the language models is known as prompt engineering. Speaking concretely, prompt engineering aims at the knowledge extraction from pre-trained large language models through text generation. However, since the vast amount of knowledge is embedded as parameters in neural networks of the language model, it does not necessarily guarantee the reconstruction of the original information from the parameters. It contributes to hallucination, where information is generated without being grounded in facts. It compromises the tactfulness and faithfulness of the output. Technically, the language models constructed with Transformer and the achievements are primarily attributed to Transformer. Transformer based on attention mechanism has replaced recurrent neural networks like LSTM and achieved high accuracy in many tasks. Transformer has the characteristics to (1) execute model training in parallel and (2) consider long-term dependencies within a text. By understanding Transformer and discussing pretrained large language models, we can clarify the strengths and weaknesses of the language model. Finally, I introduce a challenge of multimodal learning that cannot be solved with large language models. Especially, we explain media conversion that converts the content of images and videos into texts. I aim to provide one of the future directions of research on large language models.

Bio

Hidekazu Yanagimoto, Dr. Eng. is an associate professor of computer science at Graduate School of Informatics, Osaka Metropolitan University, Japan. He received his B. A., M. A., and Doctor of Engineering from Osaka Prefecture University, Japan in 1994, 1996, and 2006 respectively. He worked at Kansai C&C Laboratory, NEC, Japan from 1996 to 2000. His research interest includes natural language processing, machine learning, artificial intelligence in general, and IoT both on foundational and applicational topics. He published about 100 papers in academic journals, international conferences, and others.

July 10 (Mon) 3:00PM-4:40PM

Room C BMOT-SS2 & SBIT-SS1

Session Chair: Hiroyuki Ono (Chiba Institute of Technology)

A Framework of feature extraction of influencers

Masaki Shibuya, Motoi Iwashita and Ken Nishimatsu

Security Policy Matching Model between Mobile IoT and Public Fog Computing

Shigeaki Tanimoto, Tatsuya Sugio, Hiroyuki Sato and Atsushi Kanai

Redefining the Organization of Research and Development for Technology-Based Companies in the Age of Stakeholder Capitalism - A Purpose-Driven Management Approach -

Yukihiro Shintani

Study on Station Power Model using Train Types

Yohei Hara and Hiroyuki Ono

Room D **SCAI-SS3 2**

Session Co-Chairs: Kazunori Iwata (Aichi University), Nobuhiro Ito (Aichi Institute of Technology), *Takeshi Uchitane* (Aichi Institute of Technology)

Optimal Energy Scheduling for Communities in Smart Microgrids with Multi-Agent Reinforcement Learning

Hongyang Yang, Xun Shao, Go Hasegawa and Hiroshi Masui

Design of Task Assignments based on Ordering and Time Window constraints for RoboCupRescue Agents

Itsuki Matsunaga, Haruki Uehara, Ryoya Maeda, Joe Fujisawa, Hiroya Suzuki, Keisuke Ando, Takeshi Uchitane, Kazunori Iwata and Nobuhiro Ito

Developing a Differential Evolution with Adaptive Evaluation Function to Treat Real Optimization Problems with Black-box Constraints

Yuma Shiono, Takato Hori, Takeshi Uchitane, Nobuhiro Ito and Kazunori Iwata

Application of 5-gram to Obtain Factor Scores of Japanese Q&A Statements

Yuya Yokoyama

July 10 (Mon) 4:00PM-5:00PM

Room A+B **Poster Setting**

July 10 (Mon) 5:30PM-8:00PM

Room A+B **Welcome Reception and Poster Session**

Session Co-Chairs: Daisuke Ikeda (Kyushu University), Yuichi Ono (University of Tsukuba), Yoshikazu Asada (Jichi Medical University), Katsuhide Fujita (Tokyo University of Agriculture and Technology), Shimpei Matsumoto (Hiroshima Institute of Technology), Hidekazu Iwamoto (Josai International University), Atsushi Shimoda (Chiba Institute of Technology), Takayuki Fujimoto (Toyo University), Takaaki Hosoda (Advanced Institute of Industrial Technology)

ESKM Posters

Support for Understanding Others by Visualizing Sentiment of Social Media Posts

Harumi Murakami and Reo Saitoh

Removing Biased Data in Knowledge Graph with Ontological Reasoning

Ritik Rawat, Ihsan Ibrahim, Takaaki Kawai and Naoki Fukuta

A Preliminary Implementation of a Textbook Recommendation System for Programming Skill Education using Skill Ontology

Taichi Motegi and Naoki Fukuta

Analyzing CLS Vector Variation in CodeBert with One-Token Source Code Modification

Wakana Hashimoto and Kazuhiro Takeuchi

LTLT Posters

Design a Writing Learning Companion Chatbot based on a Knowledge Graph to Help Primary School Students Practice Writing Skill

Chang-Yen Liao

Using Interactive Visualization for Guiding Non-IT Students to Understand the Concepts of Artificial Intelligence

Hercy N. H. Cheng

Efficient Course Management using Moodle Meta Course and Collaborative Teaching Assistant Support for Information Literacy Education: A Case Study of 13 Classes

Kahori Ogashiwa, Toshihiro Kita, Kanako Ikeda, Hiroko Ueda, Anna Kuwana, Michiko Sasakura and Noriko Asamoto

Current Status of Awareness through Information Moral Training Courses for High School Students and Issues: A Case Study of Information Moral Instruction for Nursing Students

Sakiko Sumai, Norio Ishii, Yuri Suzuki and Ryo Miyazaki

Design and implement a achievement system for Enhancing students' interest and self-efficacy in mathematics.

Yen-Cheng Yeh and Jerry Yang

Design of a Virtual Reality Educational Game for the Development of Hospitality Service Application Capabilities Integrating Role-Playing Mechanism

Yu-Cheng Lin and Huei Tse Hou

Analysis of Teachers' Tacit Knowledge-based Evaluation of Learner Competencies Using Machine Learning Approach

Haruki Ueno, Mitsuru Kawazoe and Hiroshi Komatsugawa

Designing an Interactive E-book of Three Views for Enhancing Students' Spatial Ability

Hsiu-Ling Chen, Abebayehu Yohannes and Chiu-Chen Chang

Patterns and Issues for Educational Use of GAI

Hiroshi Sugimura, Tetsuo Tanaka and Kazunori Matsumoto

Design of "HANASHI KOTOBA Checker" with Machine Learning-based Sentence Expression Classification

Hiroto Yamakawa, Yumiko Yamashita, Hibiki Niida and Hiroshi Komatsugawa

Development and flow evaluation of a distance educational board game incorporating contextual learning mechanisms for children's dental protection

Pei-Ching Ngu, Chih-Chung Chien, Min-Ching Wang, Yen-Ting Ho, Hai-An Yu and Huei Tse Hou

Design and evaluation of a simulation business management educational card game combined with dynamic feedback from mobile technology

Chih-Chung Chien, Chih-Chen Kuo, Yu-Chi Chen and Huei-Tse Hou

Development and implementation of a game-based learning system with real-time facial emotion recognition technology

Yi-Chen Li, Kai-Hsiang Yang and Chih-Han Chang

The Research of Using STEM-6E Teaching Model in AR Technology Learning: System Development and Evaluation

Fang-Chuan Ou Yang

Design of VR classroom toward Kansei engineering analysis

Keiya Maruko, Kousuke Mouri, Masaru Okamoto and Yukihiro Matubara

The Development of Constructivist Flipped Classroom Learning Environments on Metaverse to Promote Problem Solving and Reasoning Skills in Mathematics of Secondary Education Grade 10th Students

Pongsaguy Rungrapeepornphong

A Mobile Learning App Using Past Exam Questions

Tetsuya Nakatoh, Hikaru Harada, Izumi Kitano, Honoka Touyou, Siori Nagano and Hazuki Fuchida

Inquiry-based Learning with a Digital Humanities Research Platform's Support to Facilitate Students' Historical Learning Performance and Satisfaction

Pei-Yu Guo, Ming-Chaun Li, Chih-Ming Chen and Chin-Yu Chen

An online educational game integrating authentic space and simulated interactive mechanism for communication skills learning

Shu-Wei Liu and Huei-Tse Hou

The designing of Simulation Learning Environment to Enhance Scientific Explanation on the Topic of Acid-base for Grade 11 Students.

Sasina Sanchimplee and Charuni Samat

Visualizing Differences in Spreadsheet Formulas Written by Information Literacy Learners Using Levenshtein Distance and Kernel PCA

Toshihiro Kita, Kahori Ogashiwa and Noriko Asamoto

Improving Students' Learning Effectiveness by an AIoT Human Centric Lighting System

Ya-Ting Yang, Yen-Pu Chen, Wei-Chun Chiang and Jeen-Shing Wang

DSIR Posters

Reanalysis of the Mission Statements of the Medium-term Goals/Plans of National University Corporations in Japan

Soichiro Aihara

The Effect of the South Korean Advancement of College Education (ACE) Program on Student Outcomes

Stephen Porter and SangAh Oh

Exploring the outcomes of a university merger: The case of Finland's Tampere University

Paul Umbach and Charles Mathies

The I-E-O-L Model and Student Survey Management - Extended the I-E-O Model and its Application

Sayaka Matsumoto, Kunihiro Takamatsu, Shotaro Imai, Tsunenori Inakura, Kyoko Anegawa and Masao Mori

Analysis of over 50000 research papers' altmetrics published in Scopus over a period of 24 weeks

Kaoru Matsumoto and Masao Mori

SCAI Posters

Multiobjective Evolutionary Learning of Interval Type-2 Fuzzy Controllers for a Wall-Following Wheeled Mobile Robot

Chia-Feng Juang and Yu-Jhong Chen

Analysis of Questions to Support Dementia Patient Family Focusing on Modality and Consideration on Chatbot Support System

Takeshi Matsuda, Ryouta Kimura, Yumiko Nakamura, Seiko Masuda and Yukie Majima

Extended floor field model for dynamic route changes

Yasuki Iizuka

Toward Applying an Improved Path Planning on Autonomus Car Parking

Suma Saathvika Duddela, Ihsan Ibrahim, Takaaki Kawai and Naoki Fukuta

A Security-enhanced Steganography Scheme for RGBE-format HDR Images

Tzung-Her Chen

An ϵ -Approximation On-line Algorithm for Quantiles Based on Counters

Kosuke Maeda and Koji Iwanuma

Using weather-based machine learning approach to estimate retail sales and interpret weather factors

Yoshiyuki Suimon, Hiroto Tanabe and Kiyoshi Izumi

Appling a hybrid CNN-LSTM network to predict PM2.5 in Kaohsiung City

Shao-Wei Yang, Kai-Jung Chen and How-Ran Guo

Time-series eye-tracking data analysis in blood sampling technology

Takeshi Matsuda, Ayame Inoue and Yuto Takagi

Detection and Clustering of Ending Parts of Novels

Masako Furukawa and Yoshitomo Yaginuma

Extraction SDGs-related sentences from Sustainability Reports using BERT and ChatGPT

Masaki Sashida, Izumi Kiyoshi and Hiroki Sakaji

Prediction performance on each interpolation and extrapolation for corrosion rates with laws using machine learning

Hirotsugu Minowa, Taisei Okura and Naoya Kasai

The Implementations of Tracking Control and Obstacle Avoidance for Wheeled Mobile Robot

Shun-Hung Tsai, Hau-En Tsai, Hung-Yi Lin and Men-Shen Tsai

An Automated Machine Learning System for Generating Myocardial Infarction Location Classifiers Using Lead-I ECG Signal

Shaunna Wang, Su-Yi Tsai and Jui-Chih Chang

An Image-based AI Nutrition Analysis Platform for Food in Compartment Trays

Shih-Chuan Huang, Wei-Chun Chiang, Ya-Ting Yang and Jeen-Shing Wang

SBIT Posters

Design and Implementation of a Resonant Wireless Charging System with Metal Barrier Through Mechanism

Ming-Jie Zeng, Yi-Feng Luo, Guan-Jhu Chen, Yu-Shan Cheng and Chun-Liang Liu

IDDC Posters

Pilot test of the mutual assistance system using a wearable device for the elderly in WEB3.0 technology

Kenji Nakamura, Keiichi Yamazaki, Yusuke Arano, Akiko Yamazaki, Hiroshi Koga, Naoya Ohta, Takuya Mitsuhashi, Hideru Obinata and Yoshiaki Ohyama

DSTM Posters

Analysis of the impact of tick size on price changes

Hiroyuki Maruyama, Hidekazu Iwamoto and Tokuro Matsuo

A Study Toward Measuring Acceptance in Decision-Making in Practical Decision-Making

Takaaki Hosoda

July 11 (Tue)

*** Registration desk is closed all day.**

July 11 (Tue) 8:45AM-4:10PM

Technical/Factorial Tour & Luncheon Keynotes

8:45AM Meet at the conference center parking at 8:45AM

9:00AM-9:10AM Bus Departure

9:10AM-12:00PM Technical/Factorial Tour

12:00PM-2:30PM Luncheon Keynotes

2:30PM-4:10PM Technical/Factorial Tour

Keynote 2

The Artificial intelligence Quo vadis: Between consciousness and conscience

Dr. Ir. Ford Lumban Gaol, SMIEEE

Department Chair, Doctor of Computer Science, Bina Nusantara University / Chairman of IEEE Computer Society Indonesia

July 11 (Tue) 6:30PM-8:30PM

Banquet & Award Presentation at 4th Floor of Koriyama View Hotel Annex

July 12 (Wed) 8:30AM-5:00PM

Foyer Registration & Morning Coffee @ Foyer

July 12 (Wed) 8:45AM-10:25AM

Room A SCAI 4

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

Text Summarization and Keyword Extraction

Pallavi Sharma and Min Chen

Remote Sensing-based Paddy Field Classification using Machine Learning Algorithms on Sentinel-1 and Sentinel-2 Satellite Data

Guntaga Logavitool, Aakash Thapa and Teerayut Horanont

Detecting speech recognition errors using topic information and BERT

Masaaki Yokoyama and Kazutaka Shimada

An Efficient Pallet Layout Planning of Conveyor-Like AGV System in the Omni-Channel Cross-Docking Operation

Teng-Sheng Su, Shi-Pei Lin, Shan-Ru Hu and Hui-Ting Liang

Room B LTLE 3

Session Chair: Ford Lumban Gaol (Bina Nusantara University)

Using game design to enhance the learning motivation of programming courses

Chih-Kai Chang, Shuo-Heng Xu, Yan-Yi Chen and Yu-Qi Ye

Scaffolding CT via Point-And-Click and P5.js

Andrea Valente, Emanuela Marchetti and Edward Abel

Multimodal Modeling of the Mora-timed Rhythm of Japanese and its Application to Computer-assisted Pronunciation Training

Evgeny Pyshkin, Akemi Kusakari, John Blake, Nam Ba Pham and Natalia Bogach

Developing a Collaborative Writing System with Visualization Interaction Network Analysis to Facilitate Online Learning Performance and Technology Acceptance

Yu-Han Lo, Ming-Chaun Li, Chih-Ming Chen and Cheng-Kai Liao

Room C **ESKM 3**

Session Chair: Sachio Hirokawa (Advanced Institute of Industrial Technology)

Exploring the Role of Social Identity and Semantic Traits in the Success of the Creator Economy

Tung-Ying Wu and Yung-Ming Li

Analysis of Effective Subcarrier Bandwidths for Different Object Detections

Hidekazu Yanagimoto, Watru Tokioka and Kiyota Hashimoto

Study-aid Books and Workbooks in Japanese Public Libraries: Questionnaire and Holdings Survey

Mayu Ogawa and Keita Tsuji

Movie Caption Generation with Vision Transformer and Transformer-based Language Model

Sorato Nakamura, Hidekazu Yanagimoto and Kiyota Hashimoto

Room D **IDDC 1**

Session Chair: Taishi Nemoto (Kagoshima Women's College)

A Knowledge Graph Perspective: Visualization Analysis of Basketball Teaching Research in China

Jin Dai and Yu-Lin Hsu

Playing Card Games on Adjustable Shuffling with Reinforcement Learning Agents

Suzuki Ryotaro and Naoki Fukuta

A Preliminary Implementation for an Ontology-based Explainable Layout Recommendation Engine for Graphics and Web-Designing Tasks

Sora Arakawa and Naoki Fukuta

Public Transportation Navigator for Bus and Train in Jakarta

Arman Syah Putra, Hubert Tjendra, Kingsley Anand Samantha, Harco Leslie Hendric Spits Warnars, Fergyanto Efendy Gunawan, Widodo

Budiharto, Ford Lumban Gaol and Tokuro Matsuo

July 12 (Wed) 10:40AM-11:55AM

Room A **SCAI 5**

Session Chair: Tenda Okimoto (Kobe University)

An Algorithm for Finding the Longest Common Almost Wave Subsequence with the Trend

Tsung-Lin Lu, Kuo-Si Huang and Chang-Biau Yang

GA-based Co-Design Algorithm with Successive Halving

Shunsuke Katayama, Kotaro Pindur and Hitoshi Iba

Room B **LTLE 4**

Session Chair: Yuichi Ono (University of Tsukuba)

Design and Implementation of a Gamification-Based Web Application for Learning High-School Physics

Toshiki Katanosaka, Fahim Khan and Ken Sakamura

Designing a visual analytics system to support a re-designed flipped learning programming class

Po-Shan Liao and Hui-Chun Hung

Room C **ESKM 4**

Session Chair: Daisuke Ikeda (Kyushu University)

Combination and Knowledge Extension of Pre-trained Language Model for Offensive Language Detection

Zhenming Li and Kazutaka Shimada

Distance-Based Analysis of Positions in Amino Acid Sequences for Structural Proteins of SARS-CoV-2 Delta and Omicron Variants

Ryota Nagashima, Uran Yamamoto and Kouichi Hirata

Automatic Multilingual Hypemym-Hyponym Relation Extraction Using a Link Prediction Model

Kohei Iwakuma, Yao Gong, Hidetsugu Nanba and Satoshi Fukuda

Room D **BMOT 1**

Session Chair: Shimpei Matsumoto (Hiroshima Institute of Technology)

System for Understanding Issues for Success of University-Launched Ventures in Business

Tomoya Hirano and Shingo Yamaguchi

Predicting the number of clicks on a local information sharing service using a CNN considering micro-event information

Daichi Inoue and Shimpei Matsumoto

A Study of Social Impact Simulation based on the History and Current Status of Multi-Agent Simulation

Tomoichi Ebata and Ryo Ariyoshi

July 12 (Wed) 1:15PM-2:30PM

Room A **SCAI 6**

Session Chair: Tenda Okimoto (Kobe University)

Kidney Cancer Detection from CT Images by Transformer-Based Classifiers

Toru Tanaka, Takaki Fukazawa, Yoshitaka Kameya, Keiichi Yamada, Kazuhiro Hotta, Tomoichi Takahashi, Naoto Sassa, Yoshihisa Matsukawa, Shingo Iwano and Tokunori Yamamoto

Disfluency detection with context information from real utterances and generative utterances

Hiroto Nakashima and Kazutaka Shimada

Room B **LTLE 5**

Session Chair: Kousuke Mouri (Hiroshima City University)

Tracking Learners' Visual Attention of a Virtual Platform during the COVID-19 Pandemic: Evidence from Eye Movements

Chun-Chia Wang, Hsuan-Chu Chen and Cheng-Yu Hsueh

The Synthesis of Learning Management Models that Promote Mathematical Problem Solving for Primary School Students in Thailand

Supaluk Chairwut and Parama Kwangmuang

Innovative Approaches to Learning: An Examination of Nano-Learning Research

Xuân Lâm Phạm, Phương Nam Nguyễn and Thị Huyền Nguyễn

Room C **ESKM 5**

Session Chair: Satoshi Fukuda (Chuo University)

A Keyword Transition Extraction Method for Time-series Text Data and Its Application to Discovering the Transition of Key Technology Elements in Japan

Fan Cheng and Takafumi Nakanishi

Predicting Geckler Classification from Gram Stained Smears Images for Sputum: Image Classification versus Object Detection

Hitoshi Sugimoto, Ryotaro Funatsu and Kouichi Hirata

Detecting Bacteria Causing Infectious Disease from Gram Stained Smears Images

Ukyo Kashino, Syoma Terada and Kouichi Hirata

Room D **BMOT 2**

Session Chair: Hidekazu Iwamoto (Josai International University)

A study on Green Transformation technology and measurement of its diversity

Jun Hosoya

Why All-Star Teams May Fail: Organizational Recombination of Individual Social Capital

Binshi Yuan, Hiroko Yamano, Yajun Wu, Tohru Yoshioka-Kobayashi and Toshiya Watanabe

Proposal of a Method to Support the Design and Evaluation of Rules that Take into Account the Mechanism of Functional Performance

Naoki Okamoto, Yoshiko Ohno, Fumihito Oura and Seiko Shirasaka

July 12 (Wed) 2:45PM-4:50PM

Room A **SCAI 7**

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

Generation of Independence for Classification in the Bio-inspired Networks

Naohiro Ishii, Kazunori Iwata, Kazuya Odagiri and Tokuro Matsuo

Person 3D Tracking and Action Recognition through Stereo Camera

Qingxiang Wang and Hiroshi Hanaizumi

Effect of influential variable based variable-ordering heuristic in small-world networks

Tenda Okimoto and Katsutoshi Hirayama

CT Reconstruction from X-ray Videos with Conditional GAN Image Translation

Masayuki Fujita

How Different Data Sources Impact Deep Learning Performance in COVID-19 Diagnosis using Chest X-ray Images

Zhang Zhang, Xiaoyong Zhang, Kei Ichiji, Ivo Bukovsky, Shuoyan Chou and Noriyasu Homma

Room B **LTLE 6**

Session Chair: Shimpei Matsumoto (Hiroshima Institute of Technology)

A Game-based Augmented Reality Navigation System to Support Makerspace User Education in a University Library

Ching-Yu Hsieh, Chih-Ming Chen and Ya-Chu Yang

Preliminary Analysis of Programming Exercise System Logs - Tward Effective Feedback to Students -

Tetsuo Tanaka, Sujan Shrestha, Tsuyoshi Miyazaki, Hidetoshi Okazaki, Nozomi Nakakawaji and Mari Ueda

Proposal of Gameplay Screen-Based Method to Convey Question's Requirements

Shimpei Matsumoto, Tomoko Kashima and Shuichi Yamagishi

The Effects of Web-based Inquiry Learning Mode with the Support of Collaborative Digital Reading Annotation System on Information Literacy

Learning Effectiveness and Technology Acceptance

Yu-Ying Pan, Ming-Chaun Li, Chih-Ming Chen and Yu-Ting Chen

Applying Augmented Reality Technology to Develop an Internet of Things Assembly Learning Guide System

Yeh Sing-Tong and Kai Yi Chin

Room C **ESKM 6**

Session Chair: Kouichi Hirata (Kyushu Institute of Technology)

New Perspectives on Stopping the Spread of Misinformation: Using Fear Appeals and Self-image to Explore the Behavioral Intention Before

Sharing a Message

Hung-Yu Chen, Yao San Lin, Liang-Sian Lin and Der-Chiang Li

Sufficient Algorithm for Inclusion of Pattern Caterpillar in Text Tree

Daisuke Abe, Tomoya Miyazaki and Kouichi Hirata

Generating Distributed Representations of Words from Japanese Wiktionary with BERT

Ryota Nishiura, Seiji Tsuchiya and Hirokazu Watabe

Japanese Patent Classification Using Few-shot Learning

Shota Hachisuka, Yuta Nakada, Hidetsugu Nanba and Satoshi Fukuda

Room D **BMOT 3**

Session Chair: Hidekazu Iwamoto (Josai International University)

Taiwan's Experience with Emergency Distribution of Masks during COVID-19 Pandemic

Chin-Wei Huang

Intellectual Property Strategy Required for Startups to Join a New Business Ecosystem: A Case Study of Tesla

Jun Oya and Naoshi Uchihira

Proposal for a Method of Deriving Performance Indicators Towards Alignment with External Factors to Organization

Kasei Miura and Seiko Shirasaka

Leverage Social and Contextual Intelligence for Personalized Social Event Recommendation

Lien-Fa Lin

Room E **SBIT-SS2**

Session Chair: Hideto Ogasawara (Chiba Institute of Technology)

Investigation of Process Economy Types Suitable for Acquiring Animation Production Funds

Tota Kikuchi and Hironori Takuma

Investigation of Factors Affecting Customer Satisfaction in Information System Development Considering Service Quality

Atsushi Shimoda and Kentaro Ichimura

Efforts to Improve Business Agility in Enterprise Agile Methodology

Hideki Kamijo and Hideto Ogasawara

Enterprise Information Mining of Corporate Adaptive Behavior Impacting on Business Performance under Drastic Changing Social Environment

Takaya Jitsui and Koji Okada

Clarification of Acceptable Boundaries for Radical Expressions in Reality Show Based on Questionnaires

Yohei Mori and Hironori Takuma

July 12 (Wed) 5:00PM-6:30PM

Foyer **Farewell Reception**

July 13 (Thu) 8:30AM-11:00AM

Foyer **Registration & Morning Coffee @ Foyer**

July 13 (Thu) 8:45AM-11:40AM

Room A **SCAI 8**

Session Chair: Kei Wakabayashi (Tsukuba University)

Lion Swarm Optimization for Base Station Placement

Zhen Liu, Jinglue Xu and Hitoshi Iba

Development of semi-automatic image annotation using object recognition

Hiroki Tanioka, Tsuyoshi Miura, Kenji Matsuura and Stephen Karungaru

Classroom Utterance Analysis Using a Generative Deep Neural Networks for Dialogue Model

Sakuei Onishi, Tomohiko Yasumori and Hiromitsu Shiina

Hybrid Crowd-AI Learning for Human-Interpretable Symbolic Rules in Image Classification

Ayame Shimizu, Kei Wakabayashi, Masaki Matsubara, Hiroyoshi Ito and Atsuyuki Morishima

Room B **BMOT 4**

Session Chair: Takashi Hasuike (Waseda University)

Application of Robotic Process Automation in collection of students satisfaction at University

Van Huy Chu and Xuan Lam Pham

Potential for Sustainable Marketing that Provides Value to both Customers and Supply Chain - Analysis of EC Site Sales Record Data -

Jundai Koketsu, Makoto Kimura and Aya Ishigaki

Crop Planning Problem with Optimal Matching Between Farmers and Consumers

Yameng Huang and Takashi Hasuike

Room C **DSTM 1 & DSTM-SS1**

Session Chair: Hiroyuki Maruyama (Advanced Institute of Industrial Technology)

Class selection problem in university using optimization problem

Hiroyuki Maruyama, Satoshi Takahashi and Tokuro Matsuo

Analysis of the Kokuho Database to Identify regional differences based on complex Health Data of latter-stage elderly

Akane Hagimoto, Aya Ishigaki and Taku Harada

July 13 (Thu) 8:45AM-13:00AM

Online Online Session

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

Visualizing University Departments' Research Achievements, Including in the Humanities and Social Sciences: A Non-Bibliometric Index Approach

Saki Liu and Tadatsugu Togawa

Preventing early turnover of new employees considering formal and informal relationships

Kentaro Iwata, Jun-Ichi Asaka, Kenta Abe, Morikazu Udagawa, Junji Ochi, Minoru Matsui, Hideki Murakoshi and Hisashi Hayashi

Concept into Architecture (CiA) – Integration of Domain Expert Knowledge into the creation of operational NAF-Architectures

Sebastian Jahnen and Stefan Pickl

Assessing the possibility of making employees multiskilled in interdepartmental human resources sharing through multi-agent simulation

Morikazu Udagawa, Jun-Ichi Asaka, Kenta Abe, Kentaro Iwata, Junji Ochi, Minoru Matsui, Hideki Murakoshi and Hisashi Hayashi

A Preliminary Analysis of Patent Applications and Inter-regional Knowledge Flows by Companies Driving Regional Growth in Japan

Katsuhiko Suzuki

A Study of Correcting Handwritten Answers for Short Essay Self-learning Systems

Takahiro Yamasaki and Ayako Hiramatsu

Relating Academic Fields and Career Paths after College Education in Japan: Through Comparison of the Trend in National and Local Public Universities

Nozomi Yoshida and Rie Mori

Next Normal Teaching and Learning: Perceptions and Readiness of Pre-Service Teachers to Promote Critical and Creative Thinking

Pornpisut Duangngern, Parama Kwangmuang and Lan Thi Nguyen

A Virtual Hand Based Manipulation Learning Framework for Dexterous Hand

Luyue Zhou, Yumeng Hu and Mengxiang Lin

The Designing Framework for Flipped Learning Environment on Metaverse to Enhance Mathematical Conceptual Understanding for Seven Grade Students

Patinya Weruwanaruk, Issara Kanjung, Nutthakarn Moeikao and Weerachai Sarakorn

July 13 (Thu) 11:40AM-1:00PM

Foyer Conference Adjournment & Ice-cold beer Networking

July 13 (Thu) 1:00PM-5:00PM

Room F IIAI AAI 2023 Committee Meeting

July 13 (Thu) 5:30PM-8:00PM

VIP Dinner